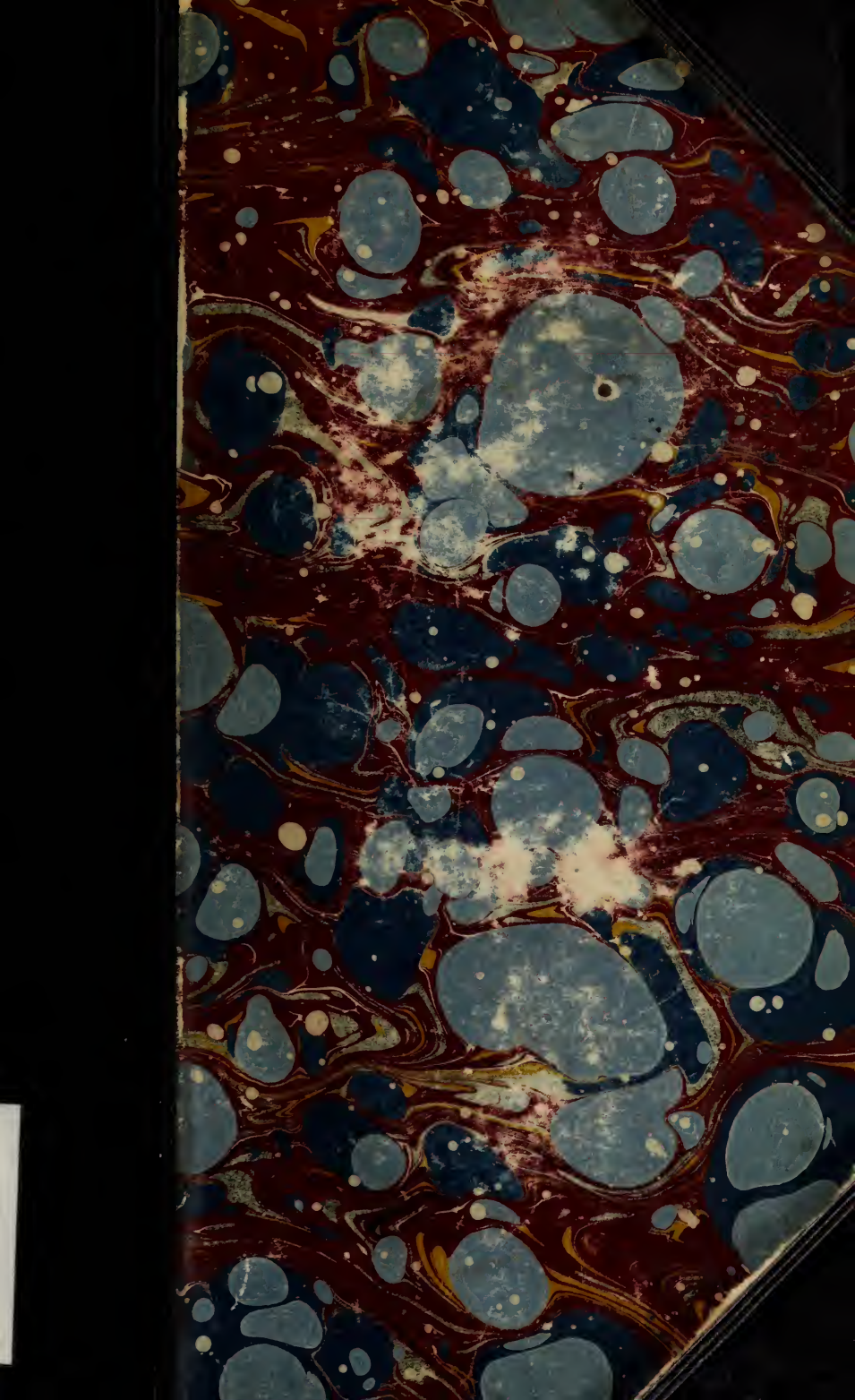
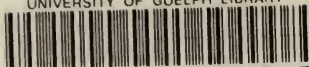




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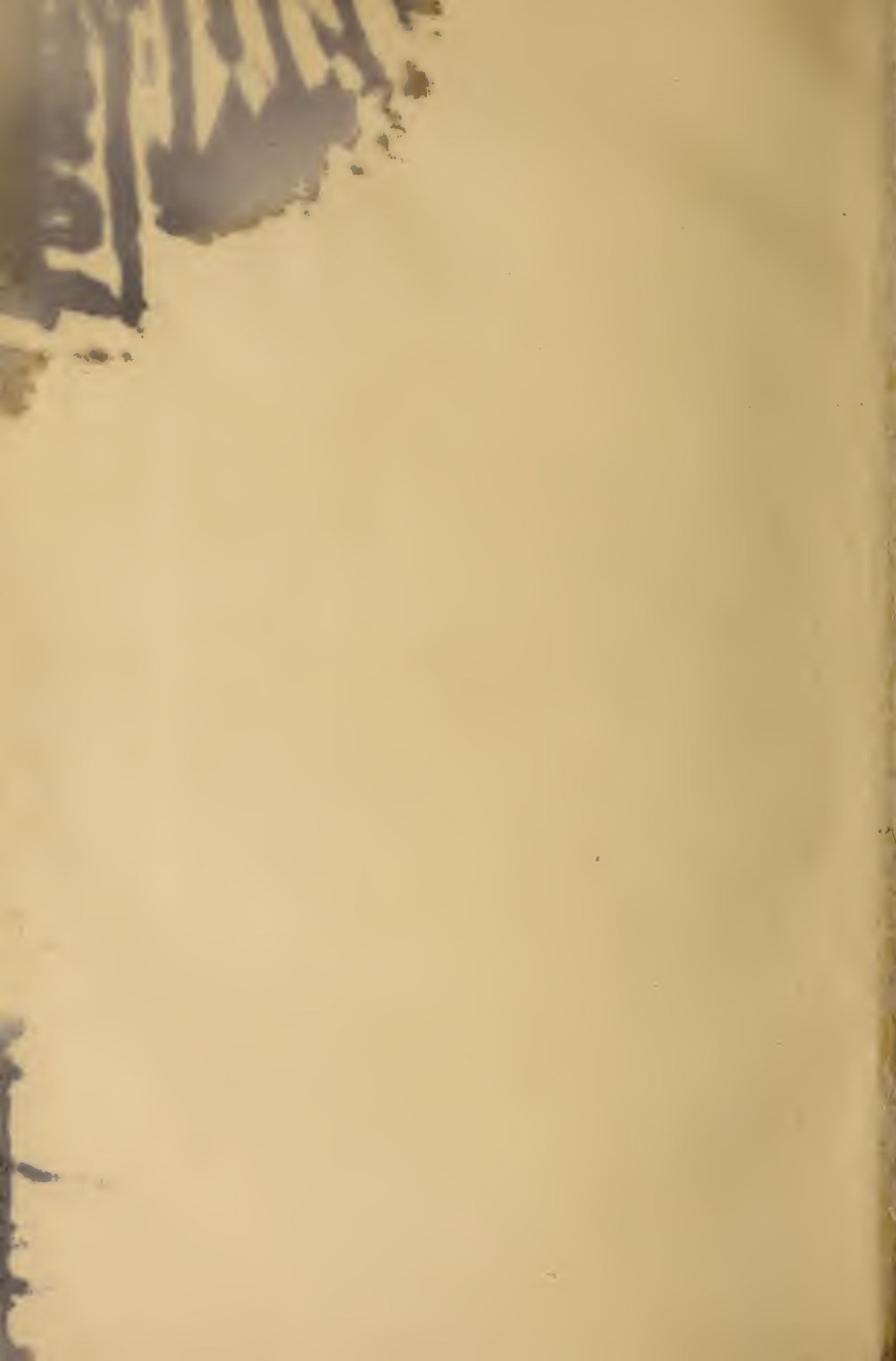
Description of the city of
Glasgow

(Handwritten initials)

To the
of the







SECOND EDITION.

THE
FORMER & PRESENT STATE OF
GLASGOW



The Ancient Breviary of the Bishops & Abbots of Glasgow

BY

JAMES CLELAND, LL.D.

PRESIDENT OF THE

GLASGOW & CLYDESDALE

Statistical Society.

GLASGOW, MDCCCXL.



DESCRIPTION
OF
THE CITY OF GLASGOW;

COMPRISING AN ACCOUNT

OF ITS

ANCIENT AND MODERN HISTORY, ITS TRADE, MANUFACTURES,
COMMERCE, HEALTH, AND OTHER CONCERNS.

BY

JAMES CLELAND, LL.D.

PRESIDENT OF THE GLASGOW AND CLYDESDALE STATISTICAL SOCIETY; HONORARY MEMBER OF
THE SOCIÉTÉ FRANÇOISE DE STATISTIQUE UNIVERSELLE, LE ROI PROTECTEUR; MEMBER
OF THE BRITISH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE; CORRESPONDING
MEMBER OF THE SOCIETY OF ANTIQUARIES OF SCOTLAND;
HONORARY MEMBER OF THE SOCIETY OF ARTS FOR SCOTLAND;
MEMBER OF THE PHILOSOPHICAL SOCIETY OF GLASGOW; MEMBER OF THE LONDON, MANCHESTER,
AND BRISTOL STATISTICAL SOCIETIES.
ETC. ETC. ETC.

“To be the herald of our country’s fame,
Our first ambition, and our dearest aim.”—GOUGH.

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THE VERY REV. DUNCAN MACFARLAN, D.D.

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JAMES J. DUNCAN, ESQ., LL.D., TREASURER,

AND WILLIAM DAVIDSON, ESQ., LL.B., SECRETARY,

THIS DESCRIPTION OF THE CITY OF GLASGOW IS MOST RESPECTFULLY INSCRIBED, BY
THE PRESIDENT.

P R E F A C E.

WHEN it was fixed that the meeting of the British Association for the advancement of science, in 1840, should be held here, I felt desirous of contributing some information for the Statistical Section, particularly as regards the unprecedented increase which has taken place during the last twenty years in Glasgow—its population—trade and commerce—sailing and steam navigation—manufacture of malleable and pig iron—river dues—custom-house duties—post-office revenue—provident banks—intercourse, &c.,—an increase which must be alike interesting to the political economist and to the statesman.

If I have been successful as a statist in any degree, it is right that I should acknowledge that I lie under deep obligations to actuaries at home and abroad; and the memory of the Right Hon. Sir John Sinclair of Ulbster, Bart., the father of Scotch statistis, will I trust be ever dear to me. The following foreigners unsolicited did me the honour of translating part of my works into the French and German languages; Mons. Jean Baptiste Say, Paris, the Adam Smith of France; Mons. Bailly, Inspector-General of Finance, Paris; Frederick Von Raumer, Professor of History in the University of Berlin; Dr. Spiker, Librarian to the King of Prussia, Berlin; Professor Friedländer of the Syndicus University, V. D. Borg, &c. To statistis of our own country my grateful acknowledgments are also due. These learned gentlemen, by the periodical presentation of their works, have placed me on vantage ground; and it would have the appearance of ingratitude if I did not acknowledge that I feel proud of the friendly correspondence of such distinguished individuals as Sir James MacGregor, Bart., M.D., Director-General of the Medical Department of the Staff in England; John Rickman, Esq., M.A., F.R.S., a Clerk of Parliament, and Compiler of the Government Population Digests; Joshua Milne, Esq., Actuary, Author of Treatises on the Law of Mortality and Annuities; George R. Porter, Esq., F.R.S., Compiler of Statistical Works, foreign and domestic, for the Board of Trade; Henry Marshall, Esq., Deputy-Inspector-General of Hospitals for Scotland; Rev. Thomas Chalmers, D.D., D.C.L., Professor of Theology in the University of Edinburgh; Rev. Thomas F. Dibdin, D.D., F.R.S., one of her Majesty's Chaplains in ordinary, who introduces his article on Glasgow in his recent NORTHERN TOUR in the following words:

"I hold in my hand the accurate and triumphant folio volume of the great statist of the north, Dr. James Cleland, by which we are carefully initiated into all the mysteries of commerce, and mazes of prosperity, together with the astounding population of upwards of 200,000 souls, of this wonderful city." To Major Tulloch, and William Farr, Esq., both of whom have rendered great service to their country by their Treatises on the Vital Statistics of the Army at home and abroad, I have likewise to return my sincere thanks.

The circumstance of the following articles having been unavoidably sent to press in detached pieces, as health would permit, will, I trust, blunt the edge of criticism for any defect that may be found in the classification.

GLASGOW, 1840.

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STATISTICS

OF

THE CITY OF GLASGOW.

SECTION I.

CONCERNING THE EARLY STATE OF THE CITY OF GLASGOW, AND ITS FORMER DEPENDENCE ON THE CHURCH.

STATISTICS.—The term Statistics is employed to denote that department of science which has been defined, “the knowledge of the present state of a country with a view to its future improvement.” This science can only be acquired by the particular and accurate investigation of every part of the country, which is its object, so as to ascertain its resources, both moral and physical. Statistics become, therefore, the basis of political economy, as they furnish the facts on which that science is based, and hence their study becomes an object of primary importance to the philosopher and the statesman.

The City of Glasgow has long laid claim to the title of the manufacturing and commercial metropolis of Scotland. It is situated on the banks of the river Clyde, in the lower ward of the County of Lanark, and lies in north latitude $55^{\circ} 51' 52''$, and in longitude, $4^{\circ} 16'$ west of Greenwich.

The early history of this City, like that of many other places, is buried in an obscurity which the most careful and diligent research has been able but in a small degree either to investigate or remove. Of its origin, therefore, or first struggle into existence, little is known prior to the erection of the Cathedral. Since that period the grants and muniments were all conceived in favour of the bishops, archbishops, and their successors; and such was the subordinate state of the inhabitants, that the whole territory of Glasgow was originally included in the privileged boundaries of the Royal Burgh of Rutherglen. About 1202, William the Lyon erected Rutherglen into a Royal Burgh. The rights of Rutherglen in the exaction of customs became distressing to the Bishops' Burghesses, and it required the express authority of a Royal Grant, in the year 1226,

to transfer the place of collection beyond the boundaries of the town. In 1238, Alexander II. erected Dumbarton into a Royal Burgh, while Glasgow did not enjoy a similar privilege till the year 1611, at which period Archbishop Spottiswood procured a Royal Charter for that purpose. It is a curious statistical fact, that the Royal Burgh of Rutherglen, situated on the banks of the same river, and within two miles of Glasgow, and which in former times was greatly its superior in trade and population, has now very little trade, and its population, at the last Government Census in 1831, was only 5,503 souls, while that of Glasgow amounted to 202,426.

This city may therefore be said to owe its existence to the church. Historians do not agree as to the time when the See of Glasgow was founded. That it is next to St. Andrews in point of antiquity is beyond all doubt. With regard to its founder, Kennett, in his "Parochial Antiquities," says that it was founded by Kentigern, St. Mungo, in 560. Doctor Helyn, speaking of the See of St. Asaph in Wales, observes that the See was founded by Kentigern, a Scot, in 583, and that Kentigern was then Bishop of Glasgow. From that period little is known of the See or the City till about the beginning of the twelfth century. In 1115, the See was refounded by David, Prince of Cumberland, and consecrated in 1133 by Bishop Achaius. From that period till the Reformation in 1560, the See was governed by twenty-six Roman Catholic Bishops, and four Roman Catholic Archbishops. In 1178, and the three succeeding years, Bishop Jocelyn made several additions to the Cathedral; but as a separate paper communicating important details connected with the Cathedral is to be read at this meeting of the Association, detail here would be superfluous. It may not, however, be out of place to remark, that the revenues which had been granted from time to time in support of the splendour of the See of Glasgow were very great.

The Archbishops were lords of the lordships of the Royalty and Barony of Glasgow; besides, there were eighteen baronies of land which belonged to them within the Sheriffdoms of Lanark, Dumbarton, Ayr, Renfrew, Peebles, Selkirk, Roxburgh, Dumfries, and the Stewartry of Annandale, including upwards of 240 parishes. It is said they had also a large estate in Cumberland within their jurisdiction, which was named of old the Spiritual Dukedom. When the See was raised to the dignity of the Archiepiscopate in 1484, jurisdiction was given over the Bishops of Galloway, Argyle, and the Isles.

Although the Presbyterian form of church government was established in Scotland soon after the Reformation, it gave place occasionally to the Episcopal mode; so that, although Kirk Sessions,* Presbyteries, Synods, and General Assemblies obtained in the church, from about the time of the Reformation till the Revolu-

* Prior to 1649, there was only one General Kirk Session in Glasgow; but in the course of that year Parochial Sessions were appointed. As these ecclesiastical courts assumed the power of censuring the measures of Government, Charles II. put them down by royal proclamation, and it was not till April, 1662, that the legal restriction was removed. At that period Archbishop Fairfowl wrote to the magistrates and ministers that his majesty had permitted the Session to resume their functions to the extent of managing the poor funds, and taking order against scandal.

tion in 1688, there had been fourteen Protestant Archbishops in succession in the See of this city.

The changes in the form of church government were as follows:—From 1560 to 1572 the form was unsettled. From 1572 to 1592 a sort of Episcopacy obtained in the church. From 1592 to 1610 it was strictly Presbyterian. From 1610 to 1638 it was again Episcopalian. In 1638 it resumed the Presbyterian form, and retained it in its fullest vigour till 1662. In 1662 it was a third time Episcopalian; and in 1688, at the Revolution, the Presbyterian form of government was formally and finally fixed for Scotland.

LAW OF CHURCH ACCOMMODATION.

The law of church accommodation was investigated and sanctioned by the Presbytery of Glasgow, on 2d August, 1809, when that reverend body expressed their adherence to the decision of the Court of Session of 22d June, 1787, whereby accommodation was to be found in the parish church of Dingwall for “two-thirds of the examinable persons in the parish,” or in other words, two-thirds of that part of the population above twelve years of age. In the first classified enumeration of the inhabitants of this city, which I drew up in 1819, the population was 147,197: of that number, 45,105 were under twelve years of age, leaving 102,092 examinable persons, two-thirds of which is 68,061, which shows that the legal church accommodation is one sitting to $2\frac{16}{100}$ persons; or in other words, two and about one-sixth persons of the whole population. While it appears that two-thirds of the examinable persons in a parish is rather less than one half of the whole population, it is evident that the exact amount cannot be ascertained without a census showing the number of persons under twelve years of age—but as an approximation, when the number of sittings in a parish is nearly equal to one half of the population, it may be considered that the law of church accommodation has been complied with.

STIPENDS OF THE CLERGY OF THE ESTABLISHED CHURCH.

CALCULATED IN SCOTS MONEY TILL 1778.

Year.	Stipend.	Year.	Stipend.
1588, 2d charge,.....£	16 13 4	1778,.....£	165 0 0
1588, 1st charge,.....	27 15 6	1796,.....	200 0 0
1638,.....	58 16 11 $\frac{1}{3}$	1801,.....	250 0 0
1642,.....	66 13 4	1808,.....	300 0 0
1643,.....	78 16 8	1814,.....	400 0 0
1723,.....	111 2 2 $\frac{1}{2}$	1830,.....	425 0 0
1762,.....	138 17 8		

The stipends of the clergymen of the Cathedral and Barony churches are now paid from teinds, which, with their glebes, amount to about £500.

ORIGIN OF DISSENTERS IN THIS CITY.

Dissent was not known in Glasgow one hundred years ago. The Jacobites had a small place of worship here in 1715, under the ministration of Bishop Alexander Duncan; and the Society of Friends had a similar hall in 1716. The first separation from the Church of Scotland was by a few eminent divines, who designated themselves "Associate Burghers;" a chapel was soon built in Shuttle-Street for that body, and Mr. James Fisher admitted as their minister in 1741. "Associate Anti-Burghers"—Mr. John Jamieson was admitted to the chapel in Havannah-Street in 1753. The magistrates and council of this city abolished the burghess oath on 25th March, 1819, which paved the way for a union between these respectable bodies. The Church of Scotland and the Original Burgher Associate Synod were incorporated in 1839. "Reformed Presbyterians"—Mr. Innes to the chapel in Calton in 1757.

PATRONAGE, FROM WHICH ISSUED DISSENT.

Prior to 1764 the congregations in this city had a certain share (through the eldership) in the election of ministers. At that period Provost John Bowman, and a majority of the Town Council, of themselves, on the principle that they who built and endowed the church had a right to present to the benefice, gave a presentation to Mr. George Bannatyne, minister of Craigie, in Ayrshire, to be minister of the Wynd church, which gave so much offence to the session that they resigned their offices. Mr. Bannatyne was admitted on 18th October, 1764. The discontent was so great that the magistrates found it necessary to invite Dr. Blair from Edinburgh, and Mr. Dalrymple from Ayr, to give countenance to the admission. The provost invited such of the ministers, and others as were favourable to the translation, to meet Mr. Bannatyne and him in the Saracen's Head, to drink a friendly glass, and to assist in procuring elders for the ensuing sacrament. This innovation, which was denounced as obnoxious, induced a great proportion of the congregation to leave the church and build a large place of worship, (now Albion-Street church). The congregation having joined the Presbytery of Relief, made choice, on 3d June, 1767, of Mr. Wm. Cruden to be their minister, who remained with them till 1774, when he went to London to be pastor of the Presbyterian chapel, Crown Court, Bow-Street, London. Soon after this the managers of the chapel joined the Establishment, and on 20th July, 1775, elected Mr. James Furlong, afterward minister of Rutherglen, to be their minister. Some of the members of the congregation, however, disapproving of an Establishment, joined the Old Independents. That eminent philanthropist, Mr. David Dale, was one of the first pastors, and remained so till his death. His friend, Mr. Archibald Paterson, built the meeting house at his own expense, in the Old Grammar School Wynd; and from his being a candle-maker, it was called the Candle Kirk. The "Wesleyan Methodists" rented a hall in Stockwell-Street, where their founder, Mr. John Wesley, used to preach while itinerating through Scotland; and, in 1786, they built their first chapel in John-Street—their chapels are supplied by itinerant preachers. New "Independents"—the circus in Jamaica-Street was fitted up as a place of worship under the denomination of the "Tabernacle," by Mr. Haldane, and was opened by the Rev. Rowland Hill of London, on 28th February, 1799. A false rumour having been

raised that one of the galleries was insufficient, a rush took place, in which some persons were injured, Mr. Hill, in the coolest manner, said—"This is the devil, who takes every method to injure God's people." Mr. Greville Ewing, formerly one of the ministers of Lady Glenorchy's chapel, Edinburgh, was admitted to the charge at the above period. In 1810, the congregation removed to West Nile-Street, where they now remain. "Unitarians"—Mr. James Yates was presented to the chapel in Union-Street in 1812. The Glassites, Bereans, Universalists, and the minor sectaries, are not here inserted.

ST. ANDREW'S EPISCOPAL CHAPEL.

Mr. James Reddoch was admitted in 1750. In 1775 an organ* was put up in the chapel, which was the only one that had been in a place of worship in Glasgow since the Reformation in 1560. The organ was procured chiefly through the good services of Mr. Duncan Niven, who had been Convener of the Trades' House in the years 1761-2, and well known to the novelist Smollett.

Prior to 1806, the Scotch and English Episcopalians in Scotland were considered as distinct bodies. In the beginning of that year the English Episcopal clergymen in Scotland gave in their submission to the Scotch bishops, when a union took place, and Glasgow was united in a diocese with Edinburgh and Fife. The first diet of confirmation of the English Episcopalians in Glasgow was on 15th May, 1806. On that occasion the Right Reverend William Abernethy Drummond, bishop of the united diocese of Edinburgh, Glasgow, and Fife, confirmed ninety persons.

SCOTCH BAPTISTS.

In 1763 an attempt was made to establish a Baptist meeting house in this city by Mr. Robert Carmichael, who had been an Anti-Burgher clergyman in Cupar-Angus; but it was not till 1769, that Mr. Neil Stewart, a house wright, and Mr. John Begg, a weaver, formed a small meeting in the High-Street. Mr. M'Lean, a Baptist pastor, came from Edinburgh soon after this, and baptised Mary Munro, Neil Stewart's wife, in the river Clyde, at Provost-Haugh. She was the first person who received immersion baptism in Glasgow.

In the beginning of 1776, Neil Stewart, George Begg, and a few of their followers, having denied the personal distinction of the Godhead, a separation took place, and the new connection met in the Old Grammar School Hall. In 1778, Mr. Robert Moncrieff, an apothecary, at that time an elder of the Old Independents, and nine others, who had been convinced of the scriptural doctrine of believer baptism, left that body, and were all publicly baptised here by Mr. M'Lean. Mr. Moncrieff, and Mr. James Duncan, bookseller, long the distinguished treasurer to the Royal Infirmary, were then chosen pastors. The society erected their meeting-house in George-Street in 1783.

* The Rev. Dr. Ritchie having introduced an organ into St. Andrew's church in this city during divine service, on Sunday, 23d August, 1807, several of his brethren and others took offence. The matter was ultimately carried before the reverend presbytery of Glasgow, when they gave it as their opinion, "that organs in churches are contrary to law, and to the constitution of the church."

ROMAN CATHOLICS.

For some time previous to the riots which took place in London in 1780, commonly known as Lord George Gordon's riots, the few Catholics here met in a clandestine manner in Blackstock's back tenement, Saltmarket-Street; and in this place my kinsman, Bishop Hay, from Edinburgh, occasionally celebrated mass. In 1780 a bill was introduced into Parliament for the repeal of certain penal statutes against Roman Catholics. On that occasion the public mind was so much agitated that eighty-five societies, supposed to consist of 12,000 persons, were formed in Scotland for opposing the bill—who, having appointed Mr. John Paterson, a spirit merchant of this city, as their head, kept up a regular correspondence with Lord George Gordon, who at that time was at the head of the Protestant Association in London. When the bill was in progress, a mob collected on a Sunday, during the time of divine service, and would have destroyed the dwelling-house where some Roman Catholics were met for the celebration of mass, had not Provost French and the other magistrates arrived in time to prevent them. On Thursday the 10th of February following, being a fast day appointed by royal authority, a great concourse of people assembled for the purpose of destroying the shop of Mr. Bagnal, a Roman Catholic, which having completely effected, they set out in great numbers to Tureen-Street, and destroyed his manufactory, notwithstanding the exertions of the magistrates to prevent such an unprovoked outrage. From about the year 1776, a great number of North Highland labourers being required in this city, Mr. George Macintosh of Dunchattan, in 1792, procured permission for them to meet for the celebration of worship in the Tennis Court, Mitchell-Street. Mr. Alexander M'Donald, afterwards bishop of Upper Canada, was the first priest. In 1797 they built a small chapel opposite to the Infantry Barracks, Gallowgate, and in 1816, a large one in Clyde-Street. The chapel in Gallowgate was then given up; and since that period the large Lancasterian School House in Gorbals has been fitted up as a Roman Catholic Chapel.

SUFFICIENT CHURCH ACCOMMODATION WITHOUT THE AID OF DISSENTERS IN 1740.

It appears that in 1740 there was sufficient accommodation for the population without the aid of Dissenters. At that period there were eight churches, viz., the Cathedral, Tron, Blackfriars, Outer High, Wynd, Ramshorn, Barony, and Gorbals. Taking these churches to average each 1,050 sittings, and the meeting houses of the Jacobites and Friends 100 each, the whole will amount to 8,600 sittings. The population in 1740 being 17,034, shows that the church accommodation was rather more than what was legally required.

INSUFFICIENCY OF CHURCH ACCOMMODATION IN 1840.

In 1840 the church accommodation is considerably deficient, notwithstanding the great and meritorious exertions made of late years by members of the Es-

tablished Church, and by the body of Dissenters. The success of the Church Building Society is beyond what its best friends anticipated. From 12th March, 1835, when St. Mark, their first church was opened, they have built twelve churches. At 1st January, 1840, there were 7344 seats let in these twelve churches. At present there are 85 places of worship in the city and suburbs; viz., Establishment, 40; United Secession, 11; Original Burghers, 1; Relief, 9; Reformed Presbyterians, 2; Original Seceders, 1; Independents, 4; Old Independents, 1; Baptists, 6; Episcopalians, 4; Wesleyan Methodists, 2; United Methodists, 1; Roman Catholics, 2; Unitarian, 1.

Taking these places of worship to average 1050 sittings each, there would be 89,250 sittings; and assuming the population, on the principle formerly narrated, to be 271,656, there will thus be a deficiency of church accommodation to the extent of somewhere about 46,000 sittings in round numbers.

CONCERNING THE SEVEN PARISH CHURCHES IN GLASGOW:

In 1780—Population, 42,832.

Church.	Clergymen's Names.	Stipend.	Seat Rents Received.	Seats not Let.
Cathedral,... ..	Mr. Wm. Taylor,	£138 17 10	£115 13 7½	£ 2 3 6
Tron,.....	Dr. John Cross,	138 17 10	57 12 3	43 17 5
Blackfriars, ...	Dr. John Gillies,	138 17 10	27 2 8	3 2 4
Outer High,.....	Mr. Robert Balfour,	138 17 10	94 13 4	1 13 3
Wynd,.....	Mr. Wm. Porteous,	138 17 10	147 6 9	2 15 3
Ramshorn,.....	Dr. Robert Findlay,	138 17 10	167 17 7	13 5 10½
St. Andrews,.....	Dr. William Craig,	138 17 10	113 0 8	46 13 3
Stipend, 2500 merks Scots,.....		£972 4 10	£723 6 10½	£113 10 10½

The Stipend of Mr. John Burns, Barony Parish, was 2000 merks Scots, equal to £111 2s. 3d. Sterling.

When the Gorbals was disjoined from the Parish of Govan in the year 1771, the stipend of Mr. William Anderson, minister, father to Dr. William Anderson, physician, was fixed at £90, including manse and glebe.

THE BISHOP'S COUNTRY PALACE.

The ancient castle of Carstairs was originally a Roman station or fortification, and was given by King David, or St. David, as he was called, in 1129, to the Bishop of Glasgow for his country palace. The following curious information is from the Rotuli Scotiæ in the Tower, published by the Record Commission.

“ When Edward I. was at Berwick, in 1292, deciding on the claims of Bruce and Baliol, he was, with the exception of the castle of Glasgow, in possession of all the fortresses in Scotland. At that period the King granted a license to

Robert Wiseheart, Bishop of Glasgow, to finish the castle of Carstairs, which had been begun without leave. The following is a copy of the license:—‘ The king and sovereign lord of the kingdom of Scotland to all his bailiffs and faithful men to whom these shall come, greeting. Whereas a venerable father in God, Robert, bishop, at his manor of Carstairs, in the county of Lanark, a certain castle of *stone and mortar*, after the death of Alexander of blessed memory, late king of Scotland, without any license began to build. We, to the said Bishop, a special grace, being willing to have granted in this part to him, for ourselves, and for our heirs, that he the said castle so begun may finish and fortify with kernels, and the same so finished and turreted or kernellated, may hold to him and his successors for ever. Nor wish we that the said Bishop, or his successors, by occasion of the said castle being begun without our license or will, as aforesaid, is by us, or our heirs, or our bailiffs, or servants whatsoever, be guarded or in any way aggrieved. Witness the king at Berwick-on-Tweed, the fifteenth of July.’ ”

It is remarkable that soon after 1292, the castle and manor of Carstairs was possessed by one of the most public spirited and benevolent bishops that ever occupied the See, and that after a lapse of more than 500 years, the magnificent mansion and extensive manor of Carstairs is owned and possessed by Mr. Henry Monteith, a citizen of Glasgow, alike distinguished for public spirit and active benevolence, whether engaged in mercantile enterprise, in the senate, or in honourable retirement. Bishop Cameron, and other bishops of Glasgow, had country residences, but it does not appear that they belonged to the See.

Mr. George Hutcheson of Lambhill, one of the founders of Hutcheson's Hospital, built the Castle of Partick for his country house in 1611. The original contract with the mason, William Millar, from Kilwinning, in the hand writing of Mr. Hutcheson, is in the possession of Mr. Laurence Hill, LL.B., of Barlanerk, a lineal descendant of the Hutchesons. The measurements were not to be taken from common rule, but from “ Mister George, *his ain fute*.” The ruins of this castle were removed in 1837. As this mansion has been long known by the name of the Bishop's Castle, it is probable that Archbishop Burnet, or one or more of the six Protestant Archbishops, who occupied the See after Mr Hutcheson's death, might have possessed it.

THE BISHOP'S TOWN PALACE.

It is uncertain when the Castle of Glasgow, or, as it was called, the Bishop's Palace, was erected. It is, however, known to have been of great antiquity. In 1300, Edward I., with the assistance of Earl Percy, stormed and took the Episcopal Palace, which was, after a severe engagement, retaken by Sir William Wallace and his friend James Cleland. In 1438, Bishop Cameron commenced building the tower. In 1508, Archbishop Beatoun enclosed the castle with an ashlar stone wall on the east, south, and west parts, and fortified it with bastions, towers, and embattlements. On 4th March, 1517, the Archbishop obtained a decret against John Mure of Caldwell, for damages done by his ancestors to the Castill of Glasgow, and breaking down the saymn with artalsary.

SECTION II.

CLIMATE IN CONNECTION WITH BILLS OF MORTALITY.

By climate, in popular language, is commonly meant "the nature of the weather usually prevalent in any particular district or country." Northern climates are more favourable to health and longevity than tropical regions. This also holds true in Scotland. In 1821,* I ascertained that there were more persons who attained the age of 80 years in the northern counties than in the southern ones. The ultimate change of seasons produces a variety which cheers the mind and acts upon the animal frame. Healthfulness in the mass of a people constitutes an essential part of national prosperity, because without it labour cannot be performed. Salubrious air and fertile soil contribute to produce an industrious peasantry.

Dr. Thomson, Professor of Chemistry in this University, gives as a reason for a greater quantity of rain falling at Edinburgh than at Glasgow—"that the latter place is about twenty miles inland from the west coast, and is therefore beyond the immediate influence of the Atlantic, which renders some parts of the north-west of England so rainy, while its distance from the east coast, and the high land between it and Edinburgh screen it from those violent rains, when the east wind blows, which are so common in Edinburgh. The distance of the hills from Glasgow is farther than from Edinburgh, and it is in some degree screened by high grounds both on the east and west."

QUANTITY OF RAIN:—A Rain Gauge, constructed by the celebrated Crichton of Glasgow, is placed on the top of the Macfarlane Observatory in the College Garden. The observatory is situated at some distance from houses or trees. The guage stands about 80 feet above the Clyde at high water mark at Hutcheson's Bridge. The situation, therefore, with the exception of its height above the river, is favourable. The late Rev. Dr. Couper, Professor of Astronomy in this University, took the charge of the guage, and prepared an annual table from the date of his induction in 1803 to 1836, with the exception of the two last years, which were drawn up since his decease by one of his sons. Dr. Couper found that the yearly average of rain which fell during 30 years was 22.175 inches. The smallest quantity which fell in any year was 14.468 in 1803, and the largest 27.801 in 1811.

The following valuable summary of the weather was prepared by Dr. Hugh Colquhoun of this city, for Dr. Robert Cowan, Professor of Forensic Medicine in this University, and published by him in his "Vital Statistics of Glasgow."

* When the Government census exhibited the ages of the population.

SUMMARY OF THE WEATHER IN 1836.

For 12 Months.	Barometer at 32°.			Thermometer.		
	at 9 a.m.	at 9 p.m.	Mean.	at 9 a.m.	at 9 p.m.	Mean.
Yearly Average,	29.813	29.822	29.818	44° 79'	44° 26'	44° 52'

Wind North,.....25 days.	Wind South,..... 7 days.
Wind North-East,.....54 days.	Wind South-West,.....124 days.
Wind East,.....19 days.	Wind West,..... 91 days.
Wind South-East,..... 5 days.	Wind North-West,..... 41 days.
72 days of high wind, or inclining to high.	275 days of cloudy or dull.
161 days without rain.	133 days rainy.
91 days clear weather.	39 days frost.
72 days changeable.	8 days snow. Total depth of snow about 20 inches.

The mean heat of Glasgow has been determined by Professor Thomas Thomson to be 47° 75', while that of Edinburgh, as determined by Professor Playfair, is 47° 7'.

Sir John Sinclair, in his Analysis of the Statistical Account of Scotland, p. 95, observes, that "the two seas by which Scotland is bounded, in consequence of their difference of temperature, have a remarkable effect on its climate. The German Ocean, which stretches along the east coast, being of small extent, and of no considerable depth, is easily affected by the changes of the seasons in the adjacent continent, insomuch that it is three degrees colder in winter, and five degrees warmer in summer than the Atlantic, which, without any material interruption, occupies the western coast of the kingdom. In summer, therefore, in consequence of the comparative temperature of the German Ocean, a copious evaporation takes place throughout its whole extent, which produces those easterly *haars*, as they are called, or thick mists, which are seen at a certain period of the day to arise from the sea, and which are not only dangerous to navigation, but, advancing upon the land, render the eastern coast often highly disagreeable."

CONCERNING BILLS OF MORTALITY.

Bills of Mortality are understood to contain a list of baptisms, marriages, and burials, in connection with the population; and it is only when these are accurately made that the probability of human life can be ascertained from them. In 1814, when I accepted a public situation which gave me unrestrained access to

the public registers, I turned my attention to population inquiry, which led to an examination of the parochial registers, when I found that, with the exception of the register of proclamation of marriages, all the others were not only defective, but totally useless. In 1819, when the registers were in this deplorable state, I was so fortunate as to procure the consent of the Magistrates and Council, the Merchants' and Trades' Houses, and Board of Police, and who cheerfully contributed toward the necessary expenses for making a general classified census, wherein I narrated the ages of the population. This was the first of the kind, I believe, in Great Britain, and the plan was followed in the Government census of 1821. Having been afterwards appointed to conduct and classify the enumeration of the inhabitants of Glasgow and Suburbs for the Government census in 1821 and 1831, and for ascertaining the probability of human life in Glasgow, it may be satisfactory to the public to show how this was accomplished. In the first place, I caused explanatory notices to be made in the newspapers, and posted on the walls of the houses where the lower orders reside, after which, the lists, agreeably to a printed form, were taken simultaneously in each of the twelve parishes by their respective parochial officer and a mercantile clerk. Having uniformly checked the lists, I can vouch for their accuracy.

As the parochial register for baptisms contained only about one half of the children baptized, I obtained a correct list in the following manner:—On 6th December, 1829, I addressed a letter to each of the seventy-five clergymen and lay pastors in the city and suburbs who baptize children, requesting to be favoured with returns of the number which they might baptize from 14th December, 1829, to 15th December, 1830, both days inclusive. I also requested the various societies of Baptists, and the society of Friends and Jews, and others who do not dispense the ordinance of baptism to infants, to favour me with similar particulars relative to the children born to members of their societies. The letter was accompanied by a small book in which the sexes and the names of the parishes in which the parents resided were to be enumerated, and in due time I had the satisfaction of receiving returns from the whole, as also an account of the children of parents who, while disapproving of infant baptism, did not belong to any religious society.

With regard to the registration of burials, the nineteen burying-grounds in the city and suburbs, connected with the population district, are placed under the superintendence of wardens. These officers, who attend every funeral, entered in a memorandum-book at the grave, the name, age, and designation of the person buried, along with the amount of fee received, and the name of the undertaker. Having taken these particulars, the warden entered the whole into a book classified conformably to a printed schedule which had been drawn up by me. At the end of the year the wardens furnished me with a detailed abstract from their books; and it was from a combination of these abstracts that I drew up the annual bills of mortality. Since 1834 the bills have been drawn up by Mr. Henry Paul and Mr. Alexander Watt, under the superintendence of a committee of the Town Council. These gentlemen have introduced several interesting details not inserted in the former bills.

GLASGOW BILL FOR 1830.

RETURN OF BAPTISMS IN THE CITY AND SUBURBS, INCLUDING CHILDREN BORN
TO BAPTISTS, ETC., DETAILED THUS:—

	Males.	Females.	Total.
In the City, ...	1481	1370	2851
Barony Parish, ...	1126	1110	2236
Gorbals Parish, ...	674	636	1310
Total, ...	3281	3116	6397
Number baptized, &c., ...	3281	3116	6397
Number registered, ...	1678	1547	3225
Number unregistered, ...	1603	1569	3172
Number of baptisms, &c., brought down, ...	3281	3116	6397
Add still-born, ...	246	225	471
Total baptisms, births, and still-born, ...	3527	3341	6868

THE CHILDREN WERE BAPTIZED, ETC., AS FOLLOWS:—

By Clergymen of the Church of Scotland, ...	3123
By Clergymen of the Secession Church, ...	664
By Clergymen of the Relief Church, ...	671
By Clergymen of the Roman Catholic Church, ...	915
By Clergymen of the Scotch Episcopal Church, Wesleyan Methodists, Independents, and other denominations, including births among Bap- tists, Society of Friends, Jews, &c., ...	1024
Total, ...	6397

The registers for the proclamation of marriages in this city have been kept so correctly as to require no improvement. The registration of marriages is, however, susceptible of amendment.

PROCLAMATION OF MARRIAGES ENGROSSED IN THE PUBLIC REGISTERS.

In the City, ...	857
Barony, ...	691
Gorbals, ...	371
Total, ...	1919

BURIALS ENGROSSED IN THE REGISTERS OF THE CITY AND SUBURBS¹ BURYING
 GROUNDS.

	Males.	Females.	Total.
January, ...	273	268	541
February, ...	226	223	449
March, ...	218	207	425
April, ...	208	184	392
May, ...	185	175	360
June, ...	200	178	378
July, ...	194	182	376
August, ...	232	206	438
September, ...	240	229	469
October, ...	236	184	420
November, ...	234	189	423
December, ...	255	259	514
Total, ...	2701	2484	5185

OF WHOM HAVE DIED,

	Males.	Females.	Total.
Still-born, ...	246	225	471
Under 1 year, ...	463	414	877
1 and under 2, ...	316	307	623
2 ... 5, ...	263	237	500
5 ... 10, ...	134	119	253
10 ... 20, ...	144	132	276
20 ... 30, ...	189	145	334
30 ... 40, ...	169	144	313
40 ... 50, ...	184	164	348
50 ... 60, ...	177	175	352
60 ... 70, ...	168	171	339
70 ... 75, ...	109	102	211
75 ... 80, ...	55	58	113
80 ... 85, ...	48	48	96
85 ... 90, ...	24	26	50
90 ... 95, ...	9	10	19
95 ... 100, ...	3	6	9
104	0	1	1
Total, ...	2701	2484	5185

ABSTRACT MORTALITY BILLS.

Bill for 1830, ...	5185	Bill for 1835, ...	7849
1831, ...	6547	1836, ...	9141
1832,*	10278	1837,*	10886
1833, ...	6632	1838, ...	7515
1834, ...	6728	1839, ...	8150

* Years of Cholera Morbus and Epidemic Typhus Fever, elsewhere narrated.

CONCERNING POPULATION.

"The population of a kingdom does not exceed the stock of the kingdom which should maintain them; neither is the population to be reckoned only by number; for a smaller number that spend more and earn less, do wear out an estate sooner than a greater number that live lower and gather more."—*Bacon*.

ABSTRACT POPULATION OF GLASGOW.

Year.	Souls.	Year.	Souls.	Year.	Souls.	Year.	Souls.
1560	4500	1708	12766	1763	28300	1801	83769
1610	7644	1712	13832	1780	42832	1811	110460
1660	14678	1740	17034	1785	45889	1821	147043
1688	11948	1755	23546	1791	66578	1831	202426

AGES OF PERSONS IN THE CITY AND SUBURES IN 1831.

	Males.	Females.	Total.
Under 5 years,	15422	14855	30277
5 to 10,	13127	12580	25707
10 to 15,	10491	10720	21211
15 to 20,	8489	12256	20745
20 to 30,	15177	23008	38185
30 to 40,	12179	14240	26419
40 to 50,	8685	9329	18014
50 to 60,	5549	6099	11648
60 to 70,	3228	3692	6920
70 to 80,	1090	1502	2592
80 to 90,	260	385	645
90 to 100,	26	32	58
100 and upwards,	1	4	5
Total,	93724	108702	202426

RESULTS DERIVED FROM THE CENSUS OF 1831.

Births—Males, ...	3527...	Females, 3341.....	Excess of Males,...	186
Males under 5 years, ...	15422...	Females, 14855.....	Excess of Males,...	567
Males under 10 years, ...	28549...	Females, 27435.....	Excess of Males,...	1114
Males under 15 years, ...	39040...	Females, 38155.....	Excess of Males,...	885
Males under 20 years, ...	47529...	Females, 50411.....	Excess of Females, 2882	
Males under 30 years, ...	62706...	Females, 73419.....	Excess of Females, 10713	
Males, entire popula. ...	93724...	Females, 108702.....	Excess of Females, 14978	
Burials—Males, ...	2701...	Females, 2484.....	Excess of Males,...	217

DESCRIPTION OF HOUSEHOLDERS.

Married men, 30,032; widowers, 1,790; bachelors, 1,437; male householders, 33,259; widows, 6,824; spinsters, 1,882; female householders, 8,706. Total families, 41,965.

The births, including 471 still born, being 6,868, and the population 202,426, there is one birth for every 29.47-100th persons.

The marriages being 1,919, there is one marriage for 105.48-100th persons.

The burials being 5,185, there is one burial for 39.4-100th persons.

The number of families being 41,965, there are 4.82-100th persons to each family.

The births being 6 868, and the number of marriages 1,919, there are 3.57-100th births to each marriage.*

COUNTRY TO WHICH THE POPULATION BELONGED.

Scotch, 163,600; English, 2,919; Irish, 35,554; Foreigners, 353. Total, 202,426.

RELIGION OF THE POPULATION.†

Established Church, 104,162; Seceders, Dissenters, Episcopalians, and Roman Catholics, 98,264. Total, 202,426.

RECORDED OPINIONS OF THE GLASGOW BILLS OF MORTALITY.

The importance of the subject, and a desire that Glasgow should continue to hold the place it has obtained in the statistical department of science, it is to be

* The data for the births, marriages, and burials are for 1830, and the population for 1831, in consequence of the impracticability of obtaining returns of baptisms for that year from clergymen.

† In 1831 there were 47 Jews resident in Glasgow; viz., males, 28; females, 19. Above twenty years of age, 28; below it, 19. Born in Prussian Poland, 11; various parts of Germany, 12; in Holland, 3; in London, 5; in Sheerness, 10; and in Glasgow, 6. A Jewish Synagogue was opened in this city in September, 1823. Mr. Moses Lisneihm is their priest, Hebrew teacher, and killer. They slay the animal with a peculiar knife, and if there is any blemish on the meat it is left for the Christians. The feast of tabernacles, which used to be celebrated by the Glasgow Jews in Edinburgh, is now observed in this city. Edward Davis, son of Mr. Edward Davis, Optician, was the first that was circumcised in Glasgow. The rite was performed by Mr. Michael, on 18th July, 1824. For an account of the Jew's burying-ground, see "Necropolis." The Jews have increased very little in this city since 1831.

Mr. Neil Stuart, a house-wright, and Mr. George Begg, a weaver, formed a small Bap-

hoped, will plead an excuse for the insertion of the following excerpts from a treatise on the *Law of Mortality* and Annuities, by that eminent author and actuary, Joshua Milne, Esq., forming the articles under those heads in the seventh edition of the *Encyclopædia Britannica*.

“For the want of understanding the principles upon which the proper construction of bills of mortality depend, most of the writers on this subject, many of them men of great merit and industry, have taken much pains to little purpose, and after excessive labour have arrived at false conclusions. Hardly any of them appear to have been aware of the necessity of obtaining the number of the living as well as of the annual deaths in each interval of age, or that that would greatly enhance the value of bills of mortality by extending their useful applications.”

“The third edition of Dr. Cleland’s Statistical Tables relative to the city of Glasgow, was published there (in 8vo) in 1823. These bills were similar to those published by Dr. Haygarth at Chester, and by Dr. Heysham at Carlisle, except that the intervals of age, the numbers of deaths that were given in under five years, were much less minute, and that the causes of death were not stated in Dr. Cleland’s bills.* That gentleman was also appointed to superintend the two enumerations of the people in the city and suburbs of Glasgow in 1821 and 1831; and having been appointed on this last occasion by the Sheriff of Lanarkshire to superintend the enumeration of the county also, in a letter to the author of this article, dated February 15th, 1831, he expressed his apprehensions that he should not be able to give a classification of the inhabitants of Glasgow and its suburbs, according to their ages at that enumeration, in the same manner as in 1821; but upon being informed, in reply, that in that case all the labour he had bestowed upon the parish registers during the ten years then elapsed would be fruitless, he answered, that, notwithstanding the extra trouble, he would prepare fresh schedules and give the number of the people of each sex in each of the same intervals of age as in 1821, which he did accordingly, and that is the only instance, except the Carlisle enumerations in January, 1780, and December, 1787, of its having been done in this country.†

tist meeting in the High-Street, in 1769. Mr. McLean, a baptist elder from Edinburgh, baptized Mary Morison, Neil Stuart’s wife, in the Clyde, at Provost Haugh. She was the first person who received immersion baptism in Glasgow.

* Although I was aware that under existing circumstances no list of diseases could be given that could be at all depended on, I addressed letters to 112 practising physicians and surgeons in the city and suburbs, (at the same time that I applied to the clergy respecting baptisms) requesting that they would favour me with the necessary information. Several complied, but a great proportion of them declared their inability to furnish any list which could at all be relied on,—many persons dying without medical assistance, and not a few where the cause of death could not be ascertained even by the most experienced practitioner. After consulting other gentlemen, eminent for their medical knowledge, unconnected with the locality, I considered it better not to give any statement than to give one which would, in all probability mislead the political inquirer.

† The Government schedules including the fifty-one parishes in the city and county having been made out without reference to ages, the returns were completed accordingly; but such was my desire to have the bills completed in unison with Mr. Milne’s recommendation that I caused fresh schedules to be drawn out, the parishes re-surveyed, and the ages of the population ascertained.

"OF ALL THE STATEMENTS DERIVED FROM BILLS OF MORTALITY AND ENUMERATIONS OF THE PEOPLE WHICH WE HAVE MENTIONED, ONLY THOSE FOR SWEDEN AND FINLAND, DR. HEYSHAM'S FOR CARLISLE, AND DR. CLELAND'S FOR GLASGOW, HAVE BEEN GIVEN IN THE PROPER FORM, AND WITH SUFFICIENT CORRECTNESS TO AFFORD THE INFORMATION, WHICH IS THE MOST IMPORTANT OBJECT OF THEM ALL, VIZ., THAT WHICH IS NECESSARY FOR DETERMINING THE LAW OF MORTALITY."

At a meeting in Bristol of the British Association for the advancement of Science, on 22d August, 1836, Baron Dupin, in his paper on "*Researches relative to the price of Grain, and its influence on the French Population*," observed that "the small annual variation in births, deaths, and marriages, even for years of great difference of price, induced him to search for a function of these three social elements, which would both render the variations more perceptible, and correcting the one by the other would remove the perturbations arising from accidental causes. This function is the mean between the number of births divided by the number of deaths, and the number of marriages divided by the number of deaths. It is sufficiently obvious that this function is independent of the amount of population, and the Baron considered its magnitude as a very fair test of social prosperity. He proposed to name it the function of vitality. In the years of extreme scarcity, the function of vitality averaged 0.5937. In the years of the high prices it averaged 0.6092. In the years of intermediate prices it averaged 0.6168. He then observed that according to Dr. Cleland's paper, read on the preceding day, the function of vitality in Glasgow was about 0.7000, a clear proof that social happiness was greater in England than in France. He trusted that this function would be calculated for the principal Continental nations, and for different epochs, in order to compare their social prosperity by a precise and identical standard. As one valuable result, he showed that this function was far less in England during seasons of commercial depression than of agricultural distress."

SECTION III.

LONDON BILLS OF MORTALITY, AND PAROCHIAL REGISTERS IN ENGLAND.

It having appeared to actuaries and others who take an interest in the Laws of Mortality, that the London bills were very defective, particularly as regards the diseases by which the population was carried off, and thus tended to mislead the political inquirer, a representation was made to the House of Commons on

15th August, 1833, who appointed a select committee on the parochial registers of England and Wales. John Wilkes, Esq., Member for Bolton, was chosen chairman. The committee examined several persons who had made the subject matter their particular study.

It appears that injunctions for parochial registers were made in England in 1538, 1547, and in 1559. In 1562 Parliament first interfered, but without effect. At length, in 1652, a Law Reform Committee was appointed, and in 1653 an Act of Parliament was passed, entitled "An Act how marriages shall be solemnised and registered, and also for a register of births and burials." It also enacted, that a person should be chosen, to be called the Parochial Registrar, who should receive fees for every entry of marriages, births, or deaths.

My attention having been called during the last twenty-five years to population returns and bills of mortality, I was naturally led to investigate the parochial registers, which I found to be not only defective, but totally useless. Appreciating the importance of accurate parochial registers to all ranks of society, I set about remodelling those connected with this district; and having printed and circulated statements, I endeavoured to impress on the minds of such of our legislators and other influential persons as I had access to, the great importance of correct registers. Some of that description were pleased to countenance the views I had taken of the subject. Among others, the late Lord Napier brought the matter before Parliament in session 1829; preparatory to which he came to Glasgow and met with myself and other individuals who had considered the matter, and were anxious for a compulsory bill for Scotland. Some parts of Lord Napier's bill not meeting with general approbation, it was withdrawn for the session, and not again introduced.

It having been found impracticable to unite Scotland with England in one general parochial act, Government, in 1833, submitted to Parliament a plan for remodelling the parochial registers in England and Wales. The plan adopted was similar in principle to what I had so long urged for the United Kingdom. Soon after the Select Committee had finished its duties, I printed, for private circulation, a letter containing detailed schedules for births, marriages, and burials, together with an abridgment of the evidence taken before the Select Committee of the House of Commons. This letter, intended as a forerunner to a public document for Scotland, was inscribed to his Grace the Duke of Hamilton and Brandon, lord lieutenant of the county, a nobleman always ready to promote every thing that has for its object the good of the country.

PAROCHIAL REGISTER FOR SCOTLAND.

The bill for England having worked so well, all that seems necessary is to obtain a similar one for Scotland, suited to the varied circumstances of the country.

EVIDENCE TAKEN BEFORE THE SELECT COMMITTEE.

George Mann Burrows, Esq., Doctor in Medicine, was for several years editor of a medical journal in the metropolis. During that period, circumstances occurred which made him consider the parochial registers as very imperfect, as also the bills of mortality. From 1814 to 1817, when he was principal editor of the London Medical Repository, he received weekly bills of mortality and registers of diseases from different medical practitioners in the different districts of the metropolis. These he prepared monthly, in the form of a table, showing the diseases from the eleven different districts into which he had divided London. About the end of the year 1817, he observed a very considerable error in the weekly bills of mortality. 1st, The principal defect he pointed out was that registers of births, baptisms, and burials,—or bills of mortality,—are not kept in every place of religious worship of different sects, and that no enumeration of burials are required from the private burying-grounds of hospitals and infirmaries. 2d, Children who die unbaptized are not entered in any register, nor noticed in the bill of mortality.

The enumeration of the births, and the names of the diseases which carry off the population, are entrusted to two women, generally aged female paupers. They can legally ask a fee of fourpence; and on their hearing from the parish clerk that there has been a death in any house, they go and demand a sight of the body—being very needy people, they are open, of course, to any fee that may be given to them to dispense with their office altogether. If, instead of fourpence, they get a shilling or half-a-crown, they go away without looking at the body, or if they do, you may naturally suppose they are very incompetent to report correctly. These searchers are perfectly inadequate for the purpose, and, in every respect, no reliance can be placed on them or their reports. They are obliged to make their returns to the parish clerks, who, from their reports, make up the bills of mortality, so that on them the representations of deaths and diseases in the bills of mortality entirely depend.

Rev. W. Hale Hale, chaplain to the bishop of London.—There is a great omission in the non-registration of half-baptisms. The registration of baptisms is of the greatest importance in the transfer of property from one person to another. Half-baptism is where a child is baptised, but without sponsors. Persons married by banns should reside in the parish; but the law has made itself inefficient, for it provides for the publication of banns in the parishes to which the parties belong; but though the banns are given in wrong, and both the parties are there described as of this parish, the law prohibits any inquiry to be made after the marriage is solemnized, it is perfectly impossible for clergymen to find out whether the persons whose banns are published are of the parish or not.

Mons. Adolphe Quetelet, Director of the Brussels Observatory, stated, that he could not sufficiently wonder, that in England there should be no correct register of births and deaths of the population. It is indeed a subject of wonder to every intelligent stranger, that in a country so intelligent as England, with so many illustrious persons occupied in statistical inquiries, and where the state of the population is the constant subject of public interest—the very basis on which

all good legislation must be grounded, has never been prepared. Foreigners can hardly believe that such a state of things could exist in a country so wealthy, wise, and great.

John Tilley Wheeler, Esq., Parish Clerk of Bermondsey, and Clerk to the worshipful Company of Parish Clerks in the city of London.—Children half-baptized are not registered. They amount to about one in ten; but some of them, I understand, are afterwards registered. The London bills of mortality include no burials which do not take place in churches or church-yards—no entries are made of those who are buried in the private burying-grounds of hospitals and infirmaries. I have had several interviews with the Under Secretary of State, and was promised that a bill should be introduced to enable us to make up the bills of mortality more correctly. The number of deaths are made out solely from the parochial registers. The diseases are all obtained from the searchers. The jurisdiction of the mortality bills, exclusive of the city parishes, include seventeen parishes in the liberties without the walls, and twenty-four parishes in Middlesex and Surrey. For the last seven or eight years, the large parishes of St. Georges, Hanover Square, St. Georges, Middlesex, and the parish of Bethnal Green,* have discontinued the use of searchers. The London bills are made under the authority of Charters and Acts of Parliament. Under Charter the Company was first incorporated in the 17th Henry III., 1233; the next Charter was 4th James I.; the next 11th Charles I.; and the last was in the 14th Charles I. By these charters, the parish clerks are to make their returns to the master and wardens on the Tuesday in every week, to enable them to make a report to the Secretary of State and the Lord Mayor. The searchers are to deliver their reports to the respective parish clerks by a certain time. The worshipful the Company of Parish Clerks have the exclusive right of issuing these bills of mortality.

John Finlaison, Esq., actuary of the national debt, in a report to the Treasury, ordered to be printed by the House of Commons, showed that no faith whatever could be placed in the London bills of mortality as they are now prepared. Neither the whole of the births nor the deaths being registered in this country. To procure the requisite data, that eminent actuary resorted to the public registers at Ostend in Flanders, where he made an observation on the mortality of the town for twenty-six years, ending January, 1832. He was enabled, from the mode in which the registers are kept at Ostend, to determine the expectation of life, and the value of annuities and of life insurance for each sex, and at every age. He also found that the mortality upon the whole population, which consists of about 11,000 souls, was annually at the rate of 1 death in $36\frac{1}{2}$ of the population. As to any thing like an account of the disease by which death is occasioned, he stated that that branch of the subject was out of the question.

It is gratifying to find that the Glasgow bill for 1830 was prepared in every respect the same as that for Ostend, with this difference, that the former was constructed in 1830 for a population of 202,426, and the latter in 1832 for a population of about 11,000.

* These three parishes contain a population of about 100,000 souls, none of the diseases in which are included in the bills of mortality.

PAROCHIAL REGISTERS DEFECTIVE.

It having been shown that the parochial registers were not only defective, but worse than useless, an Act of Parliament, Gul. IV., 6 and 7, cap. 86, was obtained for putting them on a proper footing in England and Wales; and for this purpose a superintendent local registrar was appointed for every town or district, and a registrar general was appointed to organize the system, invested with powers of control over the local registrars. In the appointment of T. H. Lister, Esq., to the office of registrar general, Government has conferred a great benefit on society. That gentleman, with splendid talents, unites a just sense of the importance of his very onerous office. The better to enable him to improve the London bills of mortality, particularly in as far as diseases are concerned, the following recommendation was issued from the eminent chiefs at the head of the medical colleges.

VITAL STATISTICS.

IMPORTANT DOCUMENT RESPECTING THE CAUSES OF DEATH.

On 1st May, 1837, the following important document from the heads of the medical colleges and apothecaries, was forwarded to the registrar general, and subsequently inserted in his first report to the Secretary of State:—

“We, the undersigned, President of the Royal College of Physicians, President of the Royal College of Surgeons, and Master of the worshipful Society of Apothecaries, having authority from the several bodies whom we represent, do resolve to fulfil the intentions of the Legislature in procuring a better registration of the causes of death, being convinced that such an improved registration cannot fail to lead to a more accurate statistical account of the prevalence of particular diseases from time to time.

“We pledge ourselves, therefore, to give in every instance which may fall under our care, an authentic name of the fatal disease; and we intreat all authorized practitioners throughout the country to follow our example, and to adopt the same practice, and so assist in establishing a better registration in future throughout England; for which purpose we invite them to attend to the subjoined explanatory statement, in which they will see set forth the provisions of the recent statute, and the means whereby the important object we have recommended may most effectually be attained.

(Signed)

“HENRY HALFORD,

“*President of the Royal College of Physicians.*

“ASTLEY COOPER,

“*President of the Royal College of Surgeons.*

“J. HINGISTON,

“*Master of the Society of Apothecaries.*”

While inserting the foregoing recommendation from the heads of the medical colleges in London, respecting the diseases by which the population died, I have the satisfaction of knowing that it is in exact accordance with the written request I made to the medical practitioners in this city in 1830, having the same object in view. This document is a virtual acknowledgment of the inefficiency of the register of diseases which were the cause of death throughout England.

A perusal of the foregoing evidence should serve as a *quietus* to those who pertinaciously built their structures of mortality on the slippery basis of the London bills.

It appears from the first annual report of the registrar general, that the causes of higher mortalities in cities than in counties arises from the insalubrity of the atmosphere. Every human being expires about 666 cubic feet of gas daily, which, if collected in a receiver, would destroy other animals, and is constantly producing in a variety of ways a decomposition of animal and vegetable matter, yielding poisonous emanations in houses, workshops, dirty streets, and bad sewers. The smoke of fires, and the produce of combustion are also poisonous. Let the rejected vegetables, the offals of slaughtered animals, the filth produced in every way, decay in the houses and courts, or stagnate in the wet streets, *bury the dead in the middle of the living*, and the atmosphere will be an active poison, which will destroy probably a fourth part of the population, as it did formerly in London.

“That mortality has a tendency to increase as the density of the population increases, but that the unhealthful tendency can be counteracted by artificial agencies. In other terms, the mortality of cities in England and Wales is high, but it may be immeasurably reduced. A good general system of sewers, the intersection of the dense crowded districts of the metropolis by a few spaces or streets, and a park in the east end of London, would probably diminish the annual deaths by several thousands, prevent many years of sickness, and add several years to the lives of the entire population. Similar improvements would have the same effects on the other cities in the empire. The poorer classes would be benefited by these measures, and the poor-rates would be reduced; but all classes of the community are directly interested in their adoption, for the epidemics, whether, influenza, typhus, or cholera, small-pox, scarlatina, or measles, which arise in the east end of the town, do not stay there: they travel to the west end, and prove fatal in wide streets and squares. The registers show this—they trace diseases from unhealthy to healthy quarters, and follow them from the centres of cities to the surrounding villages and remote dwellings.”

Mr. Farr, an eminent and voluminous writer on vital statistics, has recently drawn up a report containing accurate statements of the mortality of great towns when compared with that of country districts. The result of Mr. Farr's observations led him broadly to assert that the “source of the higher mortality is in the insalubrity of the atmosphere.” The city air, in its unmingled impurity, is a thing which people might well fly from with terror and dismay. In the open country all exhalations of this destructive nature speedily mix with the currents of the atmosphere, and are diffused so as to be perfectly harmless. But instead of one inhabitant to a square mile, which is about the density of the population in the plains of Asia, “locate 200,000 individuals upon a square mile, and the poison will be concentrated two hundred thousand fold.”

Notwithstanding this insalubrity to which the city atmosphere is exposed, observation and experience give us the comforting assurance that health will be little more impaired upon one than upon a hundred square miles, if proper means, (and the means at command) be employed for supplying the 200,000 dwellers thereon with pure air, and for removing the principal sources of poisonous exhalations. To a certain extent this may be done by a plentiful supply of water, well constructed sewers, and the *removal of burying-grounds from the heart of the population.*

The ancients buried their dead from without the cities and towns, an usage which is found equally among Jews, Greeks, and Romans; among the last, burying within the walls was expressly prohibited by law. Since the article I gave to the public in the first edition of this pamphlet, elsewhere narrated, recommending the removal of the North-West burying-ground and renovating the Wynds, went to press, Dr. Walker, an eminent physician in London, has published a very able work,—“*Gatherings from Grave-Yards*,”—which corroborates all I formerly said on the subject. The following extracts, as bearing on this point, are selected:—“No grave-yard for interment ought to be within a town. They ought to be removed to a distance from any inhabited neighbourhood. They are almost without exception the frightful source of disease. They necessarily pollute the air. There are—there must be—a constant emanation from them of corrupt and fetid gases, which mix with the atmosphere, are breathed by those who come within their influence, and become the fertile source of malignant fevers.” * * *

“I have frequently,” he continues, “been called to cases of typhus fever in an aggravated form in my immediate neighbourhood; I consequently endeavoured to ascertain the causes more immediately in operation, and I feel convinced that the *grand cause of all the evil was the immediate proximity of the burial places, public as well as private.*”

“Few persons are aware of the dreadfully deleterious nature of the gases generated in the course of the putrefaction of the human body,—of the length of time that these gases retain their poisonous qualities,—of the extent to which the *ground* in which the body is interred becomes tainted,—and of the effects which are produced on the atmosphere by the exhalations from grave-yards, particularly in warm weather. Cases have occurred of grave-diggers being suffocated at the moment of opening with a pick-axe the abdomen distended with gas. If the body has long been buried, *the surrounding earth is impregnated with a penetrating fetid odour, which persists for a long time.* Individuals who are compelled to breathe such air must suffer more or less from its influence. Such are the gases which must be constantly emanating from burial-places and contaminating the atmosphere; and however diluted by the external air, such an atmosphere cannot surely be breathed with impunity.”

“An Act of the French Parliament for abolishing interments in the vicinity of towns and cities throughout the French dominions, proceeds on the preamble ‘*that the most necessary aliments will only keep a few hours in the neighbouring houses.*’”

SECTION IV.

CONCERNING THE MEDICAL PROFESSION.

When the elder Scaliger visited Scotland about the middle of the sixteenth century, it did not contain more than one regular practitioner in medicine. On 14th September, 1598, the Kirk Session requested the "Regents in the College, and the Members of Presbytery to take order with those who pretended to have skill in medicine and had it not." In the following year, Dr. Peter Low,* a native of Glasgow, after practising in various parts of Europe, and being honoured with the appointment of Surgeon in Ordinary to Henry IV. of France, returned to Glasgow, and, in 1599, obtained from James VI. a charter or letter under the privy seal to himself and Mr. Robert Hamilton, authorizing them and their successors to examine all persons, within certain bounds, professing or using the art of Chirurgery, and to prohibit those found unqualified from practising. In 1602, Mr. Thomas Thomson having refused to attend meetings, and give his assistance, the brethren enacted, "that for his *contempus* disobedience he should *tyne* whatever he had in their box, and *tak in his bassoune*." From this expression it would appear that the Surgeons of that day exhibited emblems of trade similar to what barbers still do in country towns. The brethren then ordained "that the barbers, being a pendicle of chirurgery, should be admitted on payment of forty pund Scots." Mr. Robert Hamilton, who seems to have been a political character, was deacon of the surgeons and barbers in the years 1604, 1607, and 1608.

The Barbers, or Surgeons of the Short Robe, as they were called, it is well known, at one time formed a necessary part of the medical profession. They are equally mentioned in the more ancient documents of the corporations of Paris, of London, of Edinburgh, and of Glasgow, and no doubt of others of the same nature—their department was chiefly that of phlebotomy, dressing sores, preparing any part of the body for, and attending to it after surgical operations. On 23d June, 1605, Mr. Robert Hamilton, visitor, and the other members "considering that George Burrell, their officer, is an old burgess' son,

* It appears from the records of the Town Council, 26th May, 1610, that the Town was at the expense of *bowelling* the late chief magistrate, and that the operator, Dr. Low, had a salary from the Town. "Baillie James Braidwood debursit and gave furth the sowme of forty pund to Dr. Peter Low, partly for his fey (salary), and partly for the expensis maid by him in bowelling of the Laird of Houston, lait Provost; the Baillie also debursit the sowme of 37 lb. 10sh. as for tyme and uther expensis, furnisheid and maid be thare oun Steward the tyme of the said Provost's bowelling." Sir John Houston of Houston was elected Provost on 4th October, 1608. Mr. James Inglis, who succeeded Sir John as chief magistrate, was the first resident citizen who filled that office.

admit him a freeman on his paying £10 Scots to the common box of the craft, with liberty to him to profess the *airt of Barbarie, wt simple woundis in the flesh*, with certification that he *meddle not na furdur*." After being connected with the barbers for more than one hundred years, under the letter of Deaconry, the connection was dissolved on 22d September, 1722, when the barbers were received under a new charter as one of the fourteen Incorporations of the Burgh. The physicians and surgeons, disencumbered of this appendage, have kept pace in number and respectability with the increase of population and the advancement of science—many of them eminent for intelligence and professional ability, and not a few well known throughout the civilized world as the authors of distinguished works in various branches of the profession. A valuable and well selected library, with an admirably conducted fund for the widows and children of members, are attached to this most useful and respectable body, whose important services are felt and gratefully acknowledged by every class of their fellow citizens.

CONCERNING VACCINATION.

The Faculty of Physicians and Surgeons in Glasgow began to vaccinate the children of the poor, gratis, in May, 1801; the Cowpock Institution, on the 28th August, 1813; and the Faculty of Medicine, on 18th January, 1828. The combined labours of love of these faculties have been productive of great benefit to the community.

REPORT PRESENTED TO BOTH HOUSES OF PARLIAMENT BY THE NATIONAL VACCINE ESTABLISHMENT.

"To the Right Hon. the Marquis of Normanby, Principal Secretary of State for the Home Department.

"January 28th, 1840.

"MY LORD,—The experience of another year has confirmed our conviction of the efficiency of vaccination as the best security and protection against small-pox; and has afforded us, moreover, proofs of the propriety, in the present state of our knowledge, of preferring vaccine matter, the produce of the original virus furnished by Dr. Jenner, which has now passed happily through successive generations of subjects in the course of forty-three years, and which forms the principal source of our supply, to any which may have been taken recently from the cow. We admit that it is sometimes stated to us by our correspondents that the supply which we had sent them has failed; but the same post has generally brought us intelligence that the material supplied from the very same source had succeeded elsewhere, and that it was found efficacious in Somersetshire when it was said to be inefficient in Wiltshire. We have concluded, therefore, either that it had been injured somehow in its transmission, or that the patients submitted to it were not in a fit condition to receive its influence, in consequence of some eruptive disease having pre-occupied their constitution, or of some prevailing epidemic disorder having rendered them insusceptible of another and a new excitement for a time.

"The number of patients dead of small-pox within the bills of mortality, *if we can trust them*, has been less this year than any one since vaccination has been practised; and we are justified, by a careful retrospect of several years, in stating that 4,000 lives on an average are saved every year, within the district of the bills only, by vaccination having superseded so largely the practice of inoculation.

"We have vaccinated at our several stations 13,144 persons; and have sent out 165,395 charges of vaccine lymph since our last report to Parliament in 1839.

(Signed)

"HENRY HALFORD,
"President of the Royal College of Physicians,
"President of the Board.

"ROBERT KEATE,
"President of the Royal College of Surgeons.

"THOMAS MAYO,
"Senior Censor of the Royal College of Physicians.

"CLEMENT HUE, M.D., Registrar."

(A Bill is passing through Parliament, in session 1840, for the better regulation of Vaccination.)

In 1813,* Dr. Robert Watt, late an eminent physician in this city, with the view of ascertaining the number of children who died of small-pox and measles during thirty years, commencing in 1783, formed a table from the records of mortality, by which it appeared that during the seven years which preceded the introduction of vaccination in this city, no less than 2104 children died of small-pox;† and that during the seven years subsequent to that event there was only 795 who died of that loathsome disease; and that during the period of seven years which preceded the introduction of vaccination there was only 207 children who died of measles; but in the seven years subsequent to that period, no less than 1198 children died of that disease. The population in 1813 was about 113,000.

THE PLAGUE.

The inhabitants of this city were frequently subjected to various malignant diseases. It appears from the Bishop's Chartulary, that the plague raged here in

* Having, in 1813, assisted Dr. Watt in examining the records of mortality in this city, in reference to small-pox and measles, the conclusions drawn from the premises may be relied on as correct—but it may be said of the Glasgow records, as has been said of the London ones, "*if we can trust them.*"

† It appears from Laws Memorials, page 44, "That from September, 1671, to April, 1672, there was a great mortalitie of young ones in Glasgow by the small-pox, so that in that tyme there was cutt off to the number of 800 and upwards: hardly a familie in all the city but was infected, and rare it was to find a familie wherein some was not taken away by death." At that period the population amounted only to about 13,000 souls.

the years 1330, 1350, 1380, 1381, and again in the years 1600, 1602, 1605. In 1647, in addition to the plague, this city was afflicted with famine, while at the same time civil war was raging in the country. On 13th January, 1648, the Kirk Session directed thanksgivings to be made in all the churches on three succeeding Sabbaths for the removal of the pestilence.

LEPROSY.

This city, from an early period, seems to have been afflicted with this loathsome disease. In 1350, Lady Lochow, daughter of Robert, Duke of Albany, and mother of Colin, first Earl of Argyle, proprietrix of the lands on both sides of the river near the bridge, erected and endowed an hospital for lepers on the south side thereof. On 9th August, 1589, it was reported to the magistrates that there were then six lepers in the hospital, viz., Andrew Lawson, merchant, Steven Gilmour, cordiner, Robert, son of Patrick Bogle, Patrick Brittal, and John Thomson, tailors, and David Cunningham, tinker. These unfortunate persons were obliged to wear cloths on their mouths, and to have clappers in their hands to warn the inhabitants to keep out of their way.

GLENGORE.

On 17th April, 1600, the Kirk Session requested the magistrates "to consult the Chirurgeons how the infectious distemper of glengore (*lues venerea*) could be removed from the city. Ultimately a house was built without the stable green port, where women afflicted with that disease were sent, and a private burying-place was provided in the neighbourhood for those who died of it." The alarm occasioned by this distemper was not confined to Glasgow, for there is an old order of the Privy Council, as far back as the year 1497, "for banishing all persons afflicted with glengore to the island of Inchkeith, their to remain till God provide for their health."

CONCERNING IMPROVEMENTS SUGGESTED FOR THE HEALTH OF THE INHABITANTS.

In this manufacturing city, where a great proportion of the inhabitants are under the necessity of labouring the whole year in factories, or in uncomfortable workshops, and living in ill aired and unwholesome houses, where disease and dangerous epidemics are frequently generated, it becomes at once the duty and the interest of the authorities to procure large space for the purpose of ventilation.

In this city there are two places, among others, which particularly require renovation, the Wynds and the North-West burying-ground.

RENOVATION OF THE WYNDs.

These abodes of the citizens of Glasgow in ancient times seem to have been erected with little regard to health or comfort. A considerable part of Lindsay's Easter and Wester Wynds consists of miserable houses, elsewhere described. On the approach of an epidemic it is universally admitted to be the duty of the authorities to have the Wynds renovated; but hitherto all that has been done is to get the wretched inhabitants removed to the Fever Hospital, to fumigate and clean the houses, and to procure food, clothing, and fuel, for the destitute families. As these wretched places of abode have brought a stigma on our city, which nothing will remove but renovation, it is earnestly to be hoped that as the corporation funds have been greatly augmented of late by the sale of property, which a former magistracy preserved, that the annual expense of maintaining prisons has been reduced by statute, and as the funds are now so ample as to have sanctioned the repeal of a large portion of local taxes for the relief of a small portion of the inhabitants, it is expected that the magistrates will in like manner devote a portion of their funds for the renovation of the Wynds, which will prove a lasting benefit to the whole community. Humanity demands this at their hands, and there can be no doubt that it will be cordially responded to.

NORTH-WEST BURYING-GROUND.

When this burying-ground was formed in 1767, it may be said to have been in the country, but for many years by-past the increase of population has been such, that it is now surrounded by houses on three sides up to the very walls, and by a street on the other. A part of this burying-ground is private property, and a considerable portion of it has been reserved for the burial of those who have no burying-place of their own. This latter part has become not only an unseemly object, but an intolerable nuisance. For the want of room, the coffins are frequently laid so near the surface as to be injurious to health.

In May, 1825, I projected a scheme, accompanied with lithographed sketches, for arching over the burying-ground, and throwing it into a magnificent crypt. On that occasion a considerable number of proprietors subscribed towards the expense, but some difficulties presented themselves, and the scheme was laid aside. Being still anxious for the removal of this nuisance, and for the introduction of a large, wholesome, and well-aired space, in the very centre of the population, which might be used for useful important purposes, I submitted a plan on 21st December, 1838, for the removal of the burying-ground. This was accompanied with an engraved plan, and elevation of a portal harmonizing with St. David's church, with which it stands connected, leading to a space containing upwards of 7,500 square yards of ground. To those who are unacquainted with my predilections for improving certain parts of the city, it may naturally occur that in this and other schemes I have suggested, the corporation funds must have been involved for printing, engravings, personal charges, &c. This, however, is not the case, as they were done at my own expense.

In 1825, when the first scheme was proposed, there was a difficulty in procuring suitable burial places for those who were to give up their property in the North-

West burying-ground, on condition of receiving others in return, but since that time I commenced and completed, under the authority of the magistrates, St. Mungo's burying-ground, in the vicinity of the Cathedral and Necropolis, where exchanges may be made beneficial to all parties. For while this burying-ground is superior in every respect to that of the North-West, the exchange will be profitable to the magistrates, who will acquire a large valuable square of ground, in a most central situation, for an unproductive property.

The only objection that has been, or can be made to the scheme, is the difficulty of removing the remains from one burying-ground to another, where it is not desired that they should be sealed up where they are. This difficulty happily can be surmounted. The authorities of Edinburgh, with the aid of an Act of Parliament, some years ago, carried a street direct through the Calton burying-ground; and, without statutory enactment, in 1824, I carried Ingram-Street through the Ramshorn church-yard and the North-West grave-yard, where the burying-places belonged chiefly to the upper classes of society. In connection with the improvement of public property, where the health of the community is concerned, the improvements on the Green, elsewhere narrated, are worthy of notice.

FORMER AND PRESENT MODE OF CONDUCTING FUNERALS IN THIS CITY.

The rites of burial are looked upon in all countries, and at all times, as a sacred debt due by the living to the dead.

Prior to the Reformation, when a person died in this city, the practice was to wash the body and put a crucifix in its hand; at its feet stood a vessel full of holy water, and a sprinkler, that they who came in might sprinkle both themselves and the deceased. In the meantime, a priest stood by the corpse, and prayed for the deceased till it was laid in the earth. In the funeral procession, the exorcist (i. e. one who by abjurations and prayers drives away malignant spirits,) walked first, carrying the holy water; next, the cross-bearer, who, if the deceased had been of respectable rank in society, was followed by the rest of the clergy; and last of all by the officiating priest. They sung psalms and a requiem. The corpse was placed in the church, surrounded with lighted tapers. After the office for the dead, mass was said; then the officiating priest sprinkled the corpse thrice with holy water, and as often threw incense on it. After the interment, the friends and relations of the deceased sprinkled the grave with holy water.

For a considerable time after the Reformation it seems to have been the custom to ring a bell both at the death and the burial. The following excerpt from the records of the presbytery, is probative of this fact:—"5th Nov. 1594, the quhilk day the presbyterie declaris ye office of ye ringing of ye bell to ye burial of ye dead to be ecclesiastical, and y^t ye election of ye psone to ye ringing of ye said bell belongs to ye kirk, according to ye auncit canonis and discipline oye re-formit kirk."

So late as 1612 it was the custom to carry the train of the corpse at funerals, and to carry out the bed straw of the deceased to the street along with the body. On 28th May, the session prohibited such practices under the penalty of £5; and subsequently the dead bellman was discharged from announcing the death before the sun rising or after sun setting, without especial warrant from one of the ministers. He was not to go more than twice through the town for any person, and was to omit the word "faithful," and the repetition of the name of God. At that period it was customary to have an expensive funeral entertainment, after which the beautiful and appropriate Episcopal funeral service was performed at the grave.

At the Revolution, in 1688, when the church service was formally given up, it was resolved that a clergyman should give a prayer in the house of the deceased before the funeral. Soon after this the magistrates interdicted expensive funerals. About 1755, the practice of using spirituous liquors at funerals was nearly given up, and the service reduced to two or three glasses of wine, and *burial bread*; and that practice remained till 1805, when in my own family I thought it right to set the example of reducing the service to one glass of wine and a biscuit, which practice has continued ever since. It will be a still farther improvement if the number of persons invited to attend a funeral was to be reduced so as to be accommodated in one room, and that only one clergyman was invited to attend to give a prayer before the service. At present there are two prayers, and frequently not less than four or six ministers in attendance at the funeral of the head of a family. This additional number is a heavy tax on clergymen, who have other important duties to perform.

The sale of burial bread attracts the attention of foreigners. On 15th July, 1830, in absence of Provost Garden, William Gray, Esq., acting chief magistrate, and I, had the honour of accompanying to the public places His Royal Highness the Duke of Orleans, (then the Duke de Chartres) heir apparent to the French throne. In going down the Saltmarket-Street, his Royal Highness was tickled with the following notification in a shop window,—“BURIAL BREAD SOLD HERE;” remarking, that in France they went to a funeral to mourn, not to be entertained.

FORMER AND PRESENT BURYING-GROUNDS IN THE CITY.

The High Church-yard, or burying-ground, is probably coeval with the Cathedral; and the Black Friar's burying-ground is of great antiquity. There was a burying-ground attached to the Black Friar's convent, said to have been near the church. In 1201, Bishop Malvoison consecrated the burying-ground, and renovated the convent, which was patronized by Sir Matthew Stewart of Castlemilk. In 1210, the Grey Friars had a monastery somewhere about the bottom of the Dean-Side Brae, said to be a little south-west from the west end of Bun's Wynd. In 1441, St. Enoch Church, within St. Enoch's gate, (Tron-gate) had a principal, eight prebendaries, and a burying-ground. In 1496, the chapel of St. Roque, without the Stable Green Port, belonged to the Black

Friar's; it had a burying-ground, where, in after years, persons who died of the plague and glengore were buried. It does not appear that any of these burying-grounds survived the Reformation, with the exception of the High Church and Blackfriars. It is probable that when the buildings were destroyed the consecrated burying-grounds would be abandoned.

The following are the names and state of the burying-grounds in the city since the Reformation; viz., the before mentioned High Church and Blackfriar's grounds. In 1720, the Ramshorn church-yard was formed. In 1750, St. Andrew's Episcopal church-yard. In 1767, the North-West burying-ground. About 1785, the magistrates formed a grave-yard adjoining the Cathedral, since known by the name of the "Cathedral burying-ground."

The High Church burying-ground, which is very extensive, is private property. The Black Friar's is only a strip round the church and the entry to it, and is also private property. The same thing applies to the Ramshorn and St. Andrew's Episcopal ground. A description of the North-West is already given. A considerable portion of the Cathedral burying-ground is private property; and what belongs to the public is completely filled with dead bodies, and temporarily shut up. Seeing that the city burying-grounds were completely filled up and the North-West one continued as a most offensive nuisance, where, for want of room, the respectable warden was often obliged to dig a hole, where a number of coffins containing dead bodies were deposited without any earth to cover them, in which state they frequently remained till the fetid atmosphere became hurtful to the neighbourhood, I prevailed on the Town Council to purchase Spring Gardens from the managers of the Blind Asylum, for the purpose of forming an extensive burying-ground, preparatory to the removal of the North-West grave-yard. This was at length accomplished in 1830, and the cemetery completed in 1832. Formerly little attention had been paid to locality or the arrangement of the burying places in this city. In this case both have been attended to. This burying-ground takes its name from our titular saint, "Mungo." Nothing can be more appropriate as to locality; it is separated from the Cathedral burying-ground by a lane on the south, on the west from houses by a wide street and high walls, on the north by property belonging to the Blind Asylum, and on the east by the Molendinar rivulet and its precipitate banks, which separates St. Mungo's from the Necropolis. The Town Council having entrusted me with the design and formation of this cemetery, I spared no expense in making it complete. It is inclosed with high walls; has two spacious entrances, the west portal distinguished by appropriate Gothic architecture, in good keeping with the Cathedral. The Gothic ornamental gate, decorated with the original arms of St. Mungo, which I renovated, is worthy of notice, a representation of which is given in the title page hereof. From this portal there is one of the best views of that noble ecclesiastical edifice. The ground is slope-levelled into a gentle inclined plane. A carriage-way is formed around and through the grounds; and the soil, which is very deep, is sewer-drained throughout. The borders and side plots are planted with shrubbery and flowers. The sides and bottoms of the sepulchres are formed with hewn stones, and the tops with iron and stone monumental bearings.* The

* Our forefathers seem to have paid considerable attention to monumental designs. This is evident from the number of expensive erections on the walls of the High Church-yard.—

tombs are inclosed with appropriate iron railings: a keeper's house, and every other necessary accommodation is provided. Gas pipes are laid through the grounds; and every purchaser of a burying-place has a copy of an engraved plan of the cemetery, where his own property is shown.

Till the Necropolis was partially opened, the tombs in St. Mungo's sold very readily even at a higher rate than was afterwards obtained for similar burying-places in that splendid cemetery, but since that period the sales have been almost nominal. While the removal of the Ramshorn burying-ground is essential to the health of the community, the transference to St. Mungo's will increase the Town funds, and enable the magistrates to accommodate a number of the various classes of society with burying-places. The extent of this cemetery is not generally known. It contains 7,860 square yards of ground, or in other words, 360 square yards more than the North-West burying-ground. There are about 100 tombs still to dispose of, 150 secondary burying-places, and sufficient space for no less than 500 small ones for the working classes: a free disposition may be given to each for thirty shillings. The poorest tradesman, if industrious, might in a short period accumulate such a sum in a savings' bank, and thus be put in possession of a property which in all time coming would prevent the feelings of his family from being harrowed up by burying their dead in a hole along with several others, without even the gratification of seeing earth thrown over the remains of those whom they dearly loved.

SECTION V.

HAND-LOOM WEAVERS.

The sufferings of this interesting portion of the community have long excited the sympathy of the benevolent. In 1834-35, a Committee of the House of Commons took evidence relative to the hand-loom weavers, which ended in a very unsatisfactory manner. Soon after this, John Maxwell, Esq., younger of

The following epitaph is copied from the celebrated Dr. Lowe's monument in that burying-ground, now the property of the Faculty of Physicians and Surgeons.

“ Stay, passenger, and view this stone,
For under it lies such a one—
Heaven has his soul, his corpse this stone :
Sigh, passenger, and so begone.

Ah me ! I gravel'd am and dust ;
And to the grave descend I must—
O, painted piece of living clay,
Man, be not proud of thy short stay.”

Pollok, then member for the county of Lanark, and other philanthropists, moved the House for a Commission of Inquiry; and ultimately, Nassau William, Senior, Samuel Jones Lloyd, William Edward Hickson, and John Leslie, Esqs., were appointed her Majesty's Commissioners for "Inquiring into the condition of the Hand-Loom Weavers in the United Kingdom." The Board being resident in London, appointed Assistant Commissioners to repair to the weaving districts to inquire into the condition of the weavers, and to report to the Commissioners. J. C. Symons, Esq., was appointed Assistant Commissioner for the Glasgow district. Soon after his appointment that gentleman entered on the duties of his office, but being a total stranger in Glasgow, he very properly applied for information wherever he could find it, and among others, to myself. I need hardly say that I gave him all he required of me. Mr. Symons, who is a most active, intelligent, and accomplished person, felt it his duty not only to investigate all that related to hand-loom weavers, but to explore and hold up to public view the dens of wretchedness and the abodes of the most profligate of the human race, where no hand-loom weaver, however poor, would deign to reside. In giving the following description of the Wynds, he has not failed to waive all delicacy, and left it to be inferred that the degraded residents in the Wynds are a fair sample of the poor in Glasgow; whereas, from his observations and inquiries, it is presumed, he might have known that they are chiefly the very dregs of the Irish *canaille*, consisting of aged, lame, indolent, and infirm beggars, who from the want of the common necessities of life, a poor's rate, or voluntary contribution at home, come over to this city in shoals as steam deck passengers. During the last twenty years the fares from Belfast to Glasgow have been frequently as low as sixpence, and when higher, their neighbours pay the expense to get rid of them. Thousands of men, women, and children, have nestled themselves in the Wynds of Glasgow, where they live by begging, pay little or no rent, many of them worthless, bent on every wicked purpose; increasing our poor rates, and filling our hospitals with pestilential diseases. In drawing up his report to the Commissioners, Mr. Symons states, in terms not to be misunderstood, that "the Wynds of Glasgow comprise a fluctuating population of from 15,000 to 20,000 persons. This quarter consists of a labyrinth of lanes, out of which numberless entrances lead into small courts, each with a dunghill reeking in the centre. Revolting as was the outside appearance of these places, I was little prepared for the filth and destitution within. In some of these lodging-rooms (visited at night) we found a whole lair of human beings littered along the floor, sometimes fifteen and twenty, some clothed and some naked, men, women, and children, huddled promiscuously together. Their bed consisted of a lair of musty straw intermixed with rags. There was generally no furniture in these places. The sole article of comfort was a fire. Thieving and prostitution constituted the main source of the revenue of this population. *No pains* seems to be taken to purge this Augean pandemonium, this nucleus of crime, filth, and pestilence, existing in the centre of the second city of the empire. These Wynds constitute the St. Giles of Glasgow, but I owe an apology to the metropolitan pandemonium for the comparison. A very extensive inspection of the lowest districts of other places, both here and on the continent, never presented any thing one half so bad, either in intensity of pestilence, physical and moral, or in extent proportioned to the population."

Mr. Symons does not seem to have informed the Commissioners, the Government, and the other functionaries to whom his report is returnable, that the worthless inhabitants of the Wynds are not to be taken as a specimen of the poor of Glasgow. It appears that his services were highly appreciated, for soon after his report was issued, the Government appointed him to make a similar investigation in Belgium, and other dominions in Europe; and in drawing up his report on these places, and in his subsequent work, "Arts and Artizans at Home and Abroad," he did not fail to repeat the obnoxious statement which he had made regarding this city.

It is due to the hand-loom weavers who have emigrated from Ireland to Glasgow, to state, that, with very few exceptions, they are equally respectable as our native weavers; and the hardy, industrious Irish labourers have been very beneficial to this community. Prior to the importation of Irish vagrants, the small houses in the closes of the Wynds of Glasgow were occupied by the virtuous poor, who lived contented on their own little earnings, assisted from the assessment for the poor and other charitable funds.

It might have been expected that while Mr. Symons gave such a deplorable account of one district of the city, that he would have informed his numerous readers, that within the last forty years, a city of palaces has sprung up for the habitation of the families of the princely merchants of Glasgow, which cost upwards of ONE MILLION TWO HUNDRED THOUSAND POUNDS, the rent chargeable for taxes on that property being upwards of SEVENTY-FIVE THOUSAND POUNDS PER ANNUM. Prior to 1800, Mr. Campbell of Blythswood's property, from West Nile-Street to the Burgh of Anderston, extending to 470 acres, 1 rood, and 2 falls, was, with trifling exceptions, let for agricultural purposes, at from £1 10s. to £6 per Scotch acre of 6084½ square yards. In 1800, Messrs. Dugald Bannatyne, William Jack, and I, purchased a portion of these lands, and opened up Bath-Street, which was the commencement of the splendid town of Blythswood. Since the above period, part of these lands have been sold at "thirty shillings per square yard," converted into a feu duty of 1s. 6d. per yard, equal to £456 16s. per Scotch acre, per annum. Forty years ago, Mr. Campbell's rental from these lands amounted only to £223 1s. 3d., while at Whitsunday, 1836, the unredeemable feus secured on valuable buildings, amounted to TWELVE THOUSAND FOUR HUNDRED AND FORTY POUNDS PER ANNUM, leaving upwards of 75 acres to feu. The rental is now considerably increased.

Dr. William Pulteney Alison, an eminent physician and professor in Edinburgh university, universally esteemed for his talents and active benevolence, has lately published an able work "On the management of the poor in Scotland," into which he has introduced Mr. Symons' obnoxious account of the Wynds of Glasgow. Dr. Alison states, on the authority of Dr. Cowan, Professor of Medical Jurisprudence in this University, that it is from the extent to which this mode of life prevails in the Wynds, that Glasgow exhibits so frightful a rate of mortality, unequalled probably in any city in Britain; and the learned author, probably on the same authority, affirms that it was *perfectly* ascertained that in 1832 the average annual mortality was 1 in 21.67; and in 1837, 1 in 24.63. It does not appear

that Dr. Alison was aware that in 1832 the city was afflicted with cholera morbus. In that year there were 3731 deaths more than in the former year, and 3646 more than in the following year. It is, however, admitted in the second edition of Dr. Alison's work, page 16, that in 1836 and 1837 there were no less than 8512 fever patients in the hospitals in Glasgow. In 1837 there were 1745 deaths more than in the preceding year, and 3371 more than in the following one. Had Dr. Cowan made Dr. Alison cognisant of these facts, it is presumed he would not have given the sanction of his name to a statement that the mortality in Glasgow was unequalled in any city in Britain without assigning a reason, for the want of which an unmerited reproach has been cast on our city. It is only justice to say, that on my representation, the learned author had the candour to make the necessary explanation in the second edition of his work, in so far as cholera is concerned.*

Dr. Alison's work having met the approbation of those philanthropists who desire the amelioration of the poor, under plausible circumstances, an association of most respectable persons was formed for advancing the scheme, *inter alia*, for printing a large edition, to be circulated all over Scotland. This second edition contains also the obnoxious statement referred to. It is my earnest wish that it be perfectly known that the sole object of this article is to make it apparent that Glasgow is not so degraded and worthless as it is represented to be, and that its poor are not to be estimated by, nor compared with that part of the population of the Wynds, who by their immorality and disgraceful conduct have brought an odium on our city; and that there is not the most distant desire, on my part, to give any opinion whether the poor of Scotland should be maintained under the Scotch Acts of Parliament and the minutes of the Privy Council, as at present, or by statute, as recommended by Dr. Alison. Both of these schemes have brought to their aid men of the first consideration in society, alike for their knowledge of the working of the Poor Laws, and in an ardent desire to promote the best interests of all grades in society. Every person capable of forming a judgment on the important subject in question, whether he approves or disapproves of Dr. Alison's scheme for the ulterior management of the poor, will most readily pay honourable tribute to his head and his heart.

The readers of this pamphlet must have observed that the matters discussed are purely statistical, and that I had not the most distant idea of expressing any opinion for or against the principles laid down by Dr. Alison in his reply to the pamphlet entitled "Proposed Alterations of the Scotch Poor Laws Considered

* The following information, from the second edition of Dr. Alison's work, page 15, calls loudly for the interference of the authorities and philanthropists of Glasgow:—"The number of fever cases annually treated in the Manchester Fever Hospital, for seven years, ending 1836, was 497,—hardly one fourth of that treated in Glasgow in the same years, although the population sending patients there is nearly equal, and comprises many Irish. In 1836 and 1837, the numbers treated in hospitals in Glasgow were 8512, and in Manchester, 1391. The number of hospital patients in fever at Leeds, a manufacturing town, with 123,000 inhabitants, was 274 in the year, on an average of seven years before 1836, when the average at Glasgow was 1842. In Newcastle and Gateshead, the population of which is nearly 53,000, the number of fever patients taken into the institution appropriated to them, was only 8 in the year for some years before 1817, and only 39 in the year for seven years preceding 1836. In Carlisle and its neighbourhood, a population of above 32,000

and Commented on, by David Monypenny, Esq., of Pitmilny." On the contrary, I had determined to shut out even the name of political economy from the pamphlet, till I met with the following very startling proposition, which induced me to alter my intention, after the article had gone to press,—“I have received,” observes the learned author, “from different parts of England accounts of the ‘astonishment and abhorrence’ with which the statements in my former paper of the condition of the lowest of the people in Edinburgh and Glasgow have been there received. But independently of such information, I am confident that the general opinion of the intelligent part of the community in England is in favour of a uniform legal provision for the poor, *including the unemployed able-bodied, and of that provision securing to the aged and disabled poor, and to widows and orphans, not only a bare subsistence, but some degree of comfort.* In proof of this I might refer to such writings as those of the late Rev. Mr. Davidson of Oriel College, Oxford, of Mr. Weyland of Norfolk, and Mr. Page of Sussex; but I would refer especially to numerous recent articles in the *Quarterly Review*.”

The principle thus broadly laid down by Dr. Alison seems to be separated from a wise and practical charity. I am fully convinced, from the experience I have had in the employment of large masses of workmen, employed at labouring work, when mechanical work could not be found, that were Dr. Alison's views carried out to the extent he proposes, the consequence would be that idleness, and improvidence, and pauperism, would inundate the land. Hundreds of families would be transformed into paupers who never thought of the Poor's Roll—and any thing like a spirit of industry and independence among workmen, would in a great measure be annihilated.

During a time of mercantile distress, I think about 1819, when labour could not be got through the usual channels, about fifty able-bodied workmen of various grades, accompanied by women and children, marched up in a body to the Barony parish manse, and demanded from the venerable Dr. Burns, the minister of the parish, (as Moderator of the Kirk Session) “labour or bread for the unemployed.” As they knew they could get neither, they were only prevented from injuring the minister's property by the timely arrival of Professor Burns, the minister's son, who was a magistrate of the county of Lanark. Having failed in their application to the Kirk Session and the Courts of Law, the discontent on this head continued for many years.

I am aware that there are to be found among our philanthropists many who

yielded 63 fever patients in the year to the House of Recovery, on an average of 17 years before 1838; but in that year there was an epidemic affecting about 600 persons, of whom 265 came into the Hospital.

It appears from official documents that a vast number of Irish paupers emigrated to Liverpool prior to 1822. The number that was sent back to Ireland in the steam packets, in five years, amounted to 26,927; viz., in 1825, 3,302; in 1826, 8,283; in 1827, 5,738; in 1828, 3,940; and in 1829, 5,664. Those paupers came from 28 counties, which shows that pauperism is spread over a great part of Ireland. The overseer of the poor in Liverpool, who returns the paupers to Ireland, is allowed 3s. 6d. from the parish for every one he returns. The English poor laws give facilities for the transmission of paupers unknown in Scotland, hence the great increase of Irish paupers into Glasgow, which lies so contiguous to Belfast.

believe that the poor are willing to venerate and uphold our civil and religious institutions, if they can only enjoy under them a moderate degree of comfort and happiness, and maintain that no class of the community is more susceptible of gratitude for acts of kindness conferred on them, and that the absence of such kindness has fostered "chartism and socialism." These opinions from warm-hearted speculators are just what might be expected; but if they had experienced a practical demonstration of the bad effects of political feeling among the masses, as I and many others have done, they would, at least, have come to the conclusion that the whole was surrounded with dangers worse than any that has yet appeared in the trades' unions.

PROBABILITY OF HUMAN LIFE.

In Glasgow, ascertained by Dr. Cleland in 1830, 1 in $39\frac{4}{100}$.

In Ostend, Flanders, ascertained by Mr. Finlaison in 1833, 1 in $36\frac{12}{100}$.

In Glasgow, ascertained by Mr. Watt, who has now the sole charge of drawing up the mortality bills, under the superintendence of a Committee of the Town Council, for year ending 31st December, 1839, 1 in $33\frac{41}{100}$.

In Glasgow, in 1832, including the deaths by cholera, the mortality was 1 in $21\frac{67}{100}$; and in 1837, during the prevalence of an epidemic, 1 in $24\frac{63}{100}$.

SECTION VI.

CONCERNING TRADE AND MANUFACTURES.

The trade of Glasgow during a long period was very insignificant. Prior to the year 1300, a few fishermen had located themselves on the river side, and their habitations were denominated the Fisher Row. When the bridge was erected in 1345, the Row changed its name to Bridgegate. It appears that the trade of fishing and curing salmon and herrings for the French market was introduced by Mr. Elphinstone, grandfather to Bishop William Elphinstone of Aberdeen. The bishop, so celebrated for his acts of beneficence, was born at Glasgow in the year 1413. Principal Baillie and others inform us that this trade was carried on with varied success for about two centuries. This, with the exception of necessities for the inhabitants, seems to have been the only traffic carried on in the city till 31st January, 1638, when Robert Fleyming and partners proposed to erect a weaving factory, provided they met with proper encouragement. On which the

Town Council resolved that as a great good, utility and profit, would redound to the city, they would give the company the free use of their great lodging in Drygate, which formerly belonged to one of the prebendaries of the Cathedral. When this was made known, the freemen weavers protested against the grant, on the ground that the factory would be injurious to their interests. Patrick Bell of Dowhill, one of the partners, to get quit of the objection, agreed that *unfree* weavers should not be employed. It would appear that this was the origin of weaving factories in this city. It was not, however, till 1725, that lawns, cambrics, and other articles of similar fabric were introduced here.

About the year 1730, Mr. J. Wyatt of Birmingham first conceived the project of spinning yarn by machinery. In 1733 he made a model of a machine, from which he spun the first thread of cotton that was ever produced without the intervention of human fingers; and, to use the words of the inventor during the experiment, he was "all the time in a pleasing but trembling surprise."*

In 1742, the first mill for spinning cotton was erected in Birmingham: it was turned by two asses walking round an axis, and ten girls were employed in attending the work. This scheme having failed, a work upon a larger scale, on a stream of water, was soon after established at Northampton, under the direction of Mr. Yeoman. This work contained 250 spindles, and employed 50 pair of hands. In 1750, Mr. John Kay, a weaver in Bury, invented the fly shuttle, which greatly facilitated the process of weaving.

In 1767, Mr. Hargrave, a weaver at Stanhill near Church in Lancashire, an illiterate man, invented the spinning jenny. The machine, although of limited power when compared with the beautiful invention which succeeded it, must be considered as the first and leading step to that progress of discoveries which carried improvement into every branch of the manufacture, changing, as it proceeded, the nature and character of the means of production, and substituting mechanical operation for human labour. The progress of increase after this was rapid. The jenny having in a short time put an end to the spinning of cotton by the common wheel, the whole wefts used in the manufacture continued to be spun on that machine, until the invention of the mule jenny, by which, in its turn, it was superseded. It would appear that while Hargrave was producing the common jenny, Mr., afterwards Sir Richard Arkwright, who had been bred a barber, was employed in contriving that wonderful piece of mechanism, the "spinning frame," which, when put in motion, performs of itself the whole process of spinning, leaving to man only the office of supplying the material, and of joining or piecing the threads.

In 1769, Mr. Arkwright obtained his patent for spinning with rollers. He erected his first mill at Nottingham, which he worked with horse power; but this mode of giving motion to machinery being expensive, he built another mill at Cromford in Derbyshire, in 1775, to which motion was given by water. Water twist received its name from the circumstance of the machinery from which it

* We are indebted to Mr. John Kennedy of Manchester for much information respecting the cotton trade.

was obtained, having for a long time after its erection, been generally put in motion by water.

During the time that the machines for the different processes of cotton spinning were advancing towards perfection, the celebrated Watt had applied his admirable improvements on the steam engine to give motion to mill work in general. His inventions for this end, besides the beauty and ingenuity of contrivance which they possess, have had an influence on the circumstances of this country and of mankind, far more important than that produced by any other mechanical discovery.* In 1785, Messrs. Boulton and Watt put up an engine for Messrs. Robinson of Papplewick in Nottinghamshire, which was the first machine for spinning cotton by steam. The first in Manchester in 1790. The first in Scotland was put up in 1792, at Glasgow, opposite to what is now the steam-boat quay, for Messrs. Scott, Stevenson, & Co. In consequence of this admirable machine waterfalls became of less value; and instead of carrying the people to the power, it was thought preferable to place the power amongst the people, wherever it was most wanted.

Glasgow was the first place in Britain to manufacture inkle wares. In 1732, Mr. Alexander Harvie of this city, at the risk of his life, brought two looms and a workman from Harleem, and established a manufacture in Glasgow. The Dutchman considering himself neglected by his employer, left Glasgow in disgust, and communicated his art to Manchester.

Steam looms, or looms moved by machinery, were introduced as early as the year 1774, by the Rev. Dr. Cartwright at Doncaster. Although these looms made good cloth, there was so much time lost in dressing the warp in the loom, that they, on the whole, possessed no important advantage over the common looms.

The power loom was introduced into Glasgow in 1793, by Mr. James Lewis Robertson, who brought two looms from the Hulks on the Thames, and worked them with a Newfoundland dog walking in a drum or cylinder. This branch of the trade has since been carried on in Glasgow and neighbourhood to an incredible extent.

In 1803, Mr. Thomas Johnston of Bradbury, Cheshire, invented a beautiful and useful machine for warping and dressing warps. By this machine the dressing operation is performed much better and cheaper than can be done by the

* This great and good man was revered in his life and honoured to his death. To sum up the honours conferred on him, the Academy of Sciences of the French Institute, in 1814, paid him the highest compliment which it could bestow; it nominated him one of the eight foreign associates. Mr. Watt died on 25th August, 1819; and on 18th June, 1824, his Majesty king George IV., his Prime Minister, and men of the first consideration in the country, resolved to erect a monument to his memory in Westminster Abbey, in the words of the Premier, Lord Liverpool, "as a tribute of national gratitude to him who, by his genius and science, had multiplied the resources of his country, and improved the condition of all mankind."

Mons. Arago, perpetual Secretary to the Academy of Sciences, having drawn up the eloge of their distinguished associate, read it at a public meeting of the Academy, on 8th December,

band. Since this invention, and the subsequent improvements made upon it by Mr. Radcliffe of Stockport, extensive improvements have been made in Glasgow and elsewhere.

Lawns continued to be the staple manufacture till they were succeeded by muslins. Mr. James Monteith, Sen., father of Mr. Henry Monteith of Carstairs, was the first who warped a muslin web in Scotland. Although there were no steam mills in Scotland for spinning cotton till 1792, Mr. Monteith, long before that period, purchased *bird-nest* India yarn, and employed James Dalziel to weave a 6-4th 12⁰⁰ book with a hand shuttle, for which he paid him twenty-one pence per ell for weaving. It is worthy of remark, that the same kind of web is now wrought at 2½d. per ell. The second web was wove with a fly shuttle, which was the second used in Scotland. The Indian yarn was so difficult to wind, that Christian Gray, wife of Robert Dougall, bellman, got 6s. 9d. for winding each pound of it. When the web was finished, Mr. Monteith ordered a dress of it to be embroidered with gold, which he presented to her majesty Queen Charlotte. In 1780, the Government considering that the manufacturers of British cambrics did not any longer require protection, brought in a bill to repeal the duty on French cambrics. The Glasgow cambric manufacturers, and others interested in the trade, expressed their disapprobation of the proposed repeal by burning the minister in effigy; and in compliment to Mr. George Dempster, who had successfully opposed the bill in Parliament, they honoured him with an address and a torch-light procession through the suburb of Anderston and several parts of the city.

The following excerpt from the Report of the Factory Commission gives an idea of what the muslin trade was in Glasgow a few years ago, now considerably increased. On 21st July, 1834, Mr. Leonard Horner, one of the Factory Commissioners reported to Parliament, "That in Scotland there are 134 cotton mills, that with the exception of some large establishments at Aberdeen, and one at Stanley near Perth, the cotton manufacture is almost confined to Glasgow and country immediately adjoining, to a distance of about twenty-five miles radius, and all these cotton mills, even including the great house at Stanley, are connected with Glasgow houses, or in the Glasgow trade. In Lanarkshire, in which Glasgow is situated, there are 74 cotton factories; in Renfrewshire, 41; Dumbartonshire, 4; Buteshire, 2; Argyleshire, 1; Perthshire, 1. In these six counties there are 123 cotton mills, nearly 100 of which belong to Glasgow."

The following statement, also from the Factory Commission Report, exhibits the amount of the cotton trade in Glasgow. "In Lanarkshire there are 74 cot-

1834. In his description of Watt's invaluable labours, M. Arago observes that "Dr. Cleland had lately the kindness to offer to conduct me to the house, near the harbour of Glasgow, to which our fellow-member, on quitting his daily labours, was wont to retire and become an experimentalist. It was razed to the ground. Our vexation was extreme, but of short duration. Within the site, which could still be discerned by the traces of the foundations, ten or twelve able-bodied working men seemed busy in hallowing the nursery of modern steam engines—they were hammering with repeated blows various parts of boilers, the united dimensions of which at least equalled those of the humble habitation which had lately disappeared. On that site, and in like circumstances, the most elegant mansion, the most magnificent monument, the finest statue, could not have awakened so many thoughts as did those gigantic cauldrons."

ton mills, 2 woollen, and 2 silk factories, 78 steam engines, and 5 water wheels; total horse power, 2914; of which steam 2394, water 520. Total persons employed in factories, 17,969." In 49 of the spinning and weaving mills in Glasgow, or belonging to it, there were, in April, 1832, 10,897 workers, viz., nine to ten years old, 252; ten to twelve, 921; twelve to fourteen, 1154; fourteen to sixteen, 1200; sixteen to eighteen, 1308; eighteen to twenty-one, 1606; twenty-one and upwards, 4456. In 44 of these mills there were 640,188 mule and throstle spindles.

It appears from the very valuable history of the cotton manufacture lately drawn up by Mr. Edward Baines, Jun., of Leeds, that "in 1785 the quantity of cotton imported into Great Britain was only 18,400,384 lbs., of which there were exported 407,496 lbs. In 48 years afterwards, viz., in 1833, the quantity imported was 303,726,199 lbs., exported 17,363,882 lbs. British cotton manufacturers exported in 1833, real or declared value, £18,486,400.

Although we have seen that the manufactures of linens, lawns, and muslins, have in their turn been the staple trade of Glasgow, the citizens, from an early period, were not inattentive to other branches of trade.* In 1674 a co-partnery was entered into for carrying on the whale fishing and making soap. The soapery was at the head of Candleriggs-Street. The company had extensive premises in Greenock for boiling blubber, known by the name of the Royal Closs, from Charles II. granting certain privileges to the company. On 17th March, 1696, a company was formed for the manufacture of cordage, ropes, &c.; Crawford of Jordanhill and Corbet of Kenmure were among the first partners. In 1715 the Glasgow tan-work was commenced; Provost Bowman, Spiers of Elderslie, Campbell of Clathick, Bogle of Daldowie, and Mr. Robert Marshall were the first partners. The first delph-work in Scotland was fitted up at the Broomielaw in 1748. Provost Dinwiddie and his brother, Governor Dinwiddie, were two of the first partners. Mr. James Watt, the improver of the steam engine, was for a long time a partner in this concern. Subsequently to this all kinds of manufactures were introduced into Glasgow. The business of a licensed distiller is but of recent date in Scotland. Mr. William Menzies was the first person in the West of Scotland who had an entered still. He opened his distillery in Kirk-Street, Gorbals, in 1786. His license was the fourth in Scotland. The firms of Stein, Haig, and another, alone preceded him. At that period the duties amounted to about 1d. per gallon, and the best malt spirits were sold at 3s. per gallon of 231 cubic inches. Separate notices are hereafter taken of some of the more important branches of trade.

* The Low Countries became the seat of manufactures; various cotton and linen goods were made in Flanders in Holland, and sent to all parts of Europe. The civil war which broke out in consequence of the difference of opinion on points of religion, and the cruel persecutions which followed about the close of the sixteenth century, drove thousands of the workmen to England, and laid the foundation of those manufactures in Britain, which now supply the continent, and even India and China. Many of the Tartar princes and nobles wear British manufactures.

CONCERNING THE COAL TRADE.

It is a peculiar blessing conferred by providence on this district of country, that in addition to the produce of the soil, the bowels of the earth yield great riches from coal, iron, lime, stone, and numerous other minerals.

Coals have been in use in England from an early period. In 1272, a patent was granted by Henry III. to the town of Newcastle, authorizing the inhabitants to dig coals. But in the year 1306, the nobility and others made a complaint to Edward II. of the smoke arising from coals, the air being infected with a nauseous smell injurious to health. A proclamation forbidding the use of coals was immediately issued, and an order given to destroy all kilns and furnaces where coals were used. Coals were not brought into common use till the reign of Charles I. At the restoration in 1660, the consumpt in London was about 200,000 chalders. At the revolution in 1688, the consumption had increased to 300,000. Since that period the consumpt has been very great. It appears from a Parliamentary report, of date 8th February, 1830, that, in the year 1828, the vend of coals from the rivers Wear and Tyne, almost wholly for the London market, was 2,451,488 chalders. On 2d March, 1829, a chalder of 27 cwt., of the first quality of coal, was sold in London at 40s. 9d., while in Glasgow the same quantity was sold for 10s. 4d. In the coal trade from Newcastle to London there were no less than 45,500 persons engaged in the traffic. The capital employed by the coal owners on the Wear and Tyne amounted in 1830 to two millions one hundred thousand pounds.

There were two powerful causes which prevented the people in Scotland from having the use of coal so early as their neighbours in England. The want of capital for raising it and roads for carrying it. Powerful as these causes were, they might have been overcome, but from the degraded state in which the colliers were placed. It is almost incredible, that in a free country, boasting of its morality, the liberty of the subject, and the distribution of equal laws to the rich and the poor, this useful class of persons should have been placed in a state of slavery; but true it is, that until the year 1775, all colliers, and other persons employed in coal works, were, by the common law of Scotland, confirmed by several Acts of Parliament, in a state of slavery. They, and their wives and children, if they had assisted for a definite period at a coal work, became the property of the coal masters, and were transferable with the coal work in the same manner as the slaves on a West India estate were wont to be held as property, and transferred with the estate on the sale thereof.

It will ever remain a stain on the history of this country, that those laws did exist in Scotland till near the end of the eighteenth century, when the statute Geo. III. cap. 28, was passed to relieve the colliers from the oppression and ignominy of a state of slavery, which reflected so much dishonour on a free country.

Humanity owes a debt of gratitude to Sir Humphrey Davy, who invented the invaluable safety lamp. This lamp, which costs but a mere trifle, has introduced

quite a new era in coal mining. Many collieries are now existence, and old ones restored, producing the best coals, which must have lain dormant but for the invention of the safety lamp; and all this besides the preservation of human life.

In the year 1831, I ascertained the quantity of coals used in this manufacturing community in the following manner:—I procured the necessary information from the fifteen coal masters in the vicinity of Glasgow, and from the thirteen collieries connected with the Monkland canal, by which it appeared that the quantity sent to Glasgow amounted to 561,049 tons, and that of that quantity 124,000 tons were exported. Since 1831 the quantity sent to Glasgow has greatly increased from the increase of manufactures, steam boats, and families. The great increase of railroads, many of them in an unfinished state, renders it difficult to ascertain the exact quantity of coal that is now sent to Glasgow. It may, however, be pretty near the truth to add one-third to what was sent in 1831, thus making the quantity sent in 1840 amount to 748,065 tons.

It appears from a work by Baron Charles Dupin, that in 1825, 1,500,000 tons of coals were extracted from the French mines. It seems reasonable to suppose that the quantity of coals brought to Glasgow in 1840 is about equal to one-half of the whole extracted from the French mines in 1825; the population of France at that time was about thirty millions.

PRICE OF COALS IN GLASGOW.

The average price of coals per ton, delivered in quantities in Glasgow during nineteen years, ending 1839, (with the exception of three years of monopoly,) was 8s. 6d. It is understood that with the facilities which will be given by railroads, coal may be laid down to a great proportion of the iron works at three shillings and sixpence per ton.

Half a century has not yet passed away since the coals in Scotland were drawn from the pits by horse power. The Rev. John Bower, in the first statistical account of the parish of Old Monkland, observes that in the spring of 1792, Mr. Hamilton erected a machine for drawing up coals at Barrachney and Sandyhill coal works entirely by steam, *which was the first of the kind in Scotland*. The fire work coal pit (Govan colliery) took its name from being the first of the Glasgow pits where coal was drawn up by fire or steam.

It has often been asked, will the coal fields of Britain be exhausted in the course of time, and if so, how long will they last? This has been answered by a distinguished mining engineer, Mr. Robert Bald, F.R.S.E., M.W.S., a Fellow of the Glasgow and Clydesdale Statistical Society. That they will ultimately be exhausted is beyond a doubt, but geology has not yet supplied us with the data to fix the period when this will happen. We are sure, however, that the evil will make its approach gradually; that when the thicker and more accessible beds are worked out, recourse will be had to those that are thinner, or at a greater depth; and their prices will rise till they reach the point at which the use of wood as fuel becomes equally economical with that of coal. Forests will then be reared in this country, as they are in many parts of the continent, expressly for the fire,

unless, which is not impossible, chemistry discover other and cheaper methods of producing artificial heat. It has been computed that at the present rate of excavation, the Newcastle field will be exhausted in ONE THOUSAND YEARS, while it will require, at the rate of excavation similar to the present, SEVEN THOUSAND TWO HUNDRED YEARS to excavate the Mid Lothian field.

CONCERNING CARRON IRON WORKS.

Till 1763, there was no iron work in Scotland. Prior to that time, cast iron goods were imported from Holland. In 1760, or 1761, Mr. William Caddell, Sen., of Banton, projected the iron works at Carron in Stirlingshire, and assumed Dr. Roebuck and Mr. Garbett as partners, under the firm of Garbett, Roebuck, and Caddell. Mr. Caddell's son and son-in-law, Mr. Thomas Edington, (late of Clyde,) were joint managers. Mr. Caddell advanced £20,000 as his share of capital, but as his partners failed to advance their share, he retired from the concern in 1768 with a loss of £10,000. The remaining partners assumed Mr. Charles Gascoyne as managing partner; and about 1772 the concern became bankrupt. At that period there were only two furnaces in blast at Carron. Mr. Joseph Stainton, who had been principal clerk to the company, renovated the concern as a Joint Stock Company, under the firm of the "Carron Company," with a capital of £100,000, which was subsequently increased. This work, for a considerable time during Mr. Stainton's management, was the most extensive and successful of any of the kind in Europe.

CONCERNING THE IRON TRADE.

Although, as we have already seen, the cotton manufacture has been the staple trade of this city and neighbourhood for a long period, the iron manufacture in its various branches would appear to be the one which nature points out as likely to furnish the most advantageous employment of the labour and capital of the district, from the inexhaustible store of materials, for the making of iron, with which it abounds. The local situation, too, is peculiarly favourable for the cheap conveyance of the bulky and heavy articles of this manufacture to every quarter of the world. The city is about equidistant from the Atlantic and German seas, and not more than twenty-six miles from either, communicating with the former by the river Clyde, and the latter by the Forth and Clyde Navigation. It stands at the western extremity of the district known by the designation of the Basin of the Clyde, and which, stretching east for about twenty-six miles of considerable breadth, is one uninterrupted field of coal, interspersed with bands of rich black iron-stone. This mineral field is everywhere accessible by canals and railroads.

With these advantages for obtaining the raw material, and sending the manufactured article to market, Glasgow must soon become the seat of a great iron manufacture. She has already large establishments for the manufacture of steam engines and machinery for making the machines employed in the process of cotton, flax, and wool-spinning. In these works every thing belonging to, or connected with the mill-wright or engineer departments of the manufacture is also fabricated.

Confirmatory of the opinion that this neighbourhood ere long will become an important seat of the iron trade, it may be mentioned that the proprietors of Calder, Monkbank, Gartsherrie, Dundyvan, and Sumerlee iron works, have lately entered into a contract with Sir William Alexander, the proprietor of the Airdrie estate, for a lease of twenty-one years of the iron-stone which may be found in about 300 acres in his estate at a fixed lordship, it being a stipulation in the lease that the annual rent can never be less than £12,050, but may be considerably more. The iron-stone is black-band, two feet thick, and if it extends over the 300 acres, as there seems to be little doubt, the proprietor will receive for the iron-stone alone about £200,000. The lessees have no interest in the surface, the coal, or any other mineral that may be found in the ground. The quality of the iron-stone is such, that 200 tons, after being calcined, will produce about 120 tons pig iron. The Airdrie black-band is got near the surface, and is so combined with parrot coal, as to be calcined without the addition of other fuel. The value of the 300 acres for agricultural purposes is somewhat about £700 per annum.

The following excerpt from an interesting paper read before the Liverpool Polytechnic Society, on 13th June, 1839, by Mr. Joseph Johnston, iron merchant, Liverpool, gives a minute state of the iron trade in Scotland and South Wales. On competent authority, we find that although the trade is much subjected to fluctuation, Mr. Johnston's statements are acknowledged to be very correct.

In 1802, Great Britain possessed 168 blast furnaces, yielding a product of 170,000 tons, and this product amounted in 1806 to 250,000 tons, derived from 227 coke furnaces, of which only 159 were in activity at once.

In 1820, the make of iron had risen to 400,000 tons, and in 1826, to about 600,000 tons.

From 1823 to 1839, the iron trade saw many fluctuations. The price of pig iron varying from £2 10s. to £10 per ton at the works. But the make of this country was still increasing; and in 1838, it is believed to have reached to upwards of one million tons.

The introduction of the hot air blast by Mr. James B. Neilson, engineer, of Glasgow, formed quite a new era in the iron trade, and consequent increase of produce of iron, particularly in Scotland, where this invention was first applied, has been great beyond all expectation, and is still progressing. There are in Scotland fifty-four furnaces in blast, five out, seven building, twenty-four contemplated. The following are the names of the respective owners.

Erected in or about years	Name of Works.	Owners.	In Blast.	Out of Blast.	Building.	Contemplated.
1763	Carron, . . .	Carron Company, ...	4	1	0	0
1785	Clyde, . . .	James Dunlop, ...	4	1	0	4
1786	Wilsontown, .	William Dixon, ...	1	0	0	0
1790	Muirkirk, . .	Muirkirk Iron Company, . .	4	0	0	0
1790	Omoa, ...	Robert Stewart, ...	1	0	0	0
1790	Devon, . . .	Devon Iron Company, . . .	2	1	0	0
1805	Calder, . . .	W. Dixon & Company, . . .	6	0	0	0
1805	Shotts, . . .	Shotts Iron Company, . . .	2	0	1	0
1825	Monkland, . .	Monkland Iron Company, . .	5	0	0	0
1828	Gartsherrie, .	William Baird & Company, .	7	0	1	6
1834	Dundyvan, . .	John Wilson, ...	5	0	1	4
1836	Sumerlee, . .	Wilsons & Company, . . .	4	0	0	2
With the exception of Bona, the other furnaces in blast are of recent date.	Bona, ...	Bona Iron Company, ...	1	0	0	0
	Govan, ...	William Dixon, ...	2	0	0	4
	Coltness, . . .	Henry Houldsworth, ...	2	0	0	0
	Carnbroe, . . .	Alison & Company, ...	2	0	2	2
	Galston, . . .	M'Callum & Company, ...	0	1	0	0
	Blair, ...	J. M'Donald, ...	0	0	2	0
	Housel, ...	— Galloway, ...	0	1	0	2
	Castlehill, . .	Shotts Iron Company, ...	2	0	0	0
			54	5	7	24

Supposing the whole of these furnaces to be in full activity at the end of the year 1842, and giving the average produce of 100 tons per week to each furnace, we shall have Scotland alone producing 468,000 tons of foundry cast iron per annum, equalling the make of the United Kingdom twenty years ago. Sixty-five out of the ninety furnaces enumerated,* are situated in or about the Monklands, to the south and south-east of Glasgow, and distant from that city seven to ten miles. The works in that district have the command of the black-band iron-stone, which is so great an advantage, that without it the profits of the trade would be most materially diminished.

Three of the largest makers of iron in Scotland are directing their attention to the manufacture of bar iron, and with every prospect of complete success. The Monkland Iron Company are erecting mills and forges capable of making 230 tons malleable iron per week. Mr. Wilson of Dundyvan is making preparations to enable him, when in full operation, to make 300 tons of bars, &c., weekly; and they will be partially at work in two months from the date of this report. Mr. Dixon, of Govan Iron Works, has now ready for immediate working, capabilities

* In the twelve groups into which France is divided for the iron factories, there are 502 furnaces for making pig iron; viz., 465 with charcoal, 29 with coke, and 8 with a mixture of charcoal and coke. It appears from a valuable work, published in 1827, by Baron Charles Dupin, on the *Force and Production of France*, that in 1827 there were 160,000 tons of cast iron made in France.

for producing 200 tons of malleable iron per week. These mills and forges are on the outskirts of Glasgow, and are known as the Glasgow Iron Works.

The Muirkirk Iron Company have four blast iron furnaces, three of which, and sometimes four, are in blast, with an average produce of about 40 tons of bars weekly, with a capability of extending to 100 tons, without increase of power.

This statement comprises the present, and, as far as is known, the prospective operations of the malleable iron trade in Scotland, with the exception of two small forges, the Lancefield and the Gartness, where they puddle a little from white iron.

The new furnaces at Carnbroe have yielded the extraordinary quantity of 136 tons per week, of very strong iron, and frequently run out 10 tons at a cast.

The following is an abstract specification of the hot air blast:—Mr. Neilson lately obtained patents applicable to this country and France, for the manufacture of iron by "*hot blast*." By the use of this invention, in which raw coal is used instead of coke, the iron-master, with three-sevenths of the fuel which he formerly employed in the cold air process, is now enabled to make one-third more iron, of a superior quality. Nor are the advantages of this invention solely confined to iron masters. By its use the founder can cast into goods an equal quantity of iron, in greatly less time, and with a saving of nearly half the fuel employed in the cold air process; and the blacksmith can produce in the same time one-third more work with much less fuel than he formerly required. In all the processes of metallurgical science it will be found of the utmost importance in reducing the ores to a metallic state. The charge for leave to use the hot blast is at the rate of one shilling for every ton of iron made from it. The foregoing narrated furnaces are all worked on the hot blast principle, with the exception of two at Carron Iron Works.

CONCERNING THE RIVER CLYDE.

The navigation of the Clyde being intimately connected with the prosperity of Glasgow, a brief account of the improvements of that river cannot fail to be acceptable.

In 1556, the magistrates of Glasgow, Renfrew, and Dumbarton, agreed to remove some of the fords, so that small boats might pass from Dumbarton to Glasgow. It appears that the merchants of that city, for several years prior to 1658, had their shipping harbour on the Ayrshire coast; but as that port was distant, and land carriage consequently expensive, the corporation of Glasgow in that year negociated with the magistrates of Dumbarton for the purchase of ground for the erection of a harbour and docks. After a deal of discussion, the negociation broke off: the magistrates of Dumbarton conceiving that the great influx of mariners would raise the *price of provisions to the inhabitants*. In the

Rev. Dr. Duncan's Statistical Account of the Parish of Dundonald, it is said that "after the failure at Dumbarton, the magistrates of Glasgow made offer to feu a part of the lands of Troon for a shipping harbour, but the proprietor declined to part with it for any such purpose, as it would raise *the price of butter and eggs.*" Having also failed at the Troon, (now the shipping harbour of His Grace the Duke of Portland,) the magistrates of Glasgow, in 1662, purchased thirteen acres of ground from Sir Robert Maxwell of Newark, on which they laid out the town of Port-Glasgow, built harbours, and made the first dry or graving dock in Scotland.

Prior to the revolution, there was only a landing shore in Glasgow; but in 1688 a small quay was made from the mouth of St. Enoch's burn downwards. In 1755 and 1758, Mr. Smeaton, the celebrated engineer, surveyed the river, and gave in two reports. On the faith of one of these, the magistrates, in 1759, obtained an Act of Parliament for rendering the river navigable by *means of locks.* As this scheme did not give general satisfaction, Dr. Wilson made a survey, and produced a report, which induced the magistrates to consult Mr. John Golbourn of Chester, civil engineer, who reported, in 1769, that the river was in a state of nature, that as far down as Kilpatrick there was only two feet of water, and recommended jetties or dykes instead of locks. His scheme having been approved of, an Act of Parliament was procured in 1770, when the members of the corporation were appointed trustees, with power to levy dues. In 1775, Mr. Golbourn had so far improved the river that small vessels drawing six feet water could come up to Glasgow at the height of a spring tide. Less than fifty years ago, a few gabbarts, and these only about 30 or 40 tons burthen, came up to Glasgow; and I recollect the time when, for weeks together, not a vessel of any description was to be found at the port of Glasgow. The increase of trade consequent on the improvements of the river, almost exceeds belief. By the year 1821, vessels drawing thirteen feet six inches water came up to the harbour; and now large vessels, many of them upwards of 350 tons burthen, from America, the East and West Indies, and the continent of Europe, as well as coasters, are to be found three or four deep along the whole length of the harbour. During the year 1834, about 27,000 vessels passed Renfrew Ferry, and at some periods in that year between twenty and thirty in one hour. The Camden, the first ship unconnected with the East India Company which brought a cargo of tea direct from Canton to Britain, was for Glasgow merchants. Her cargo was sold in the Glasgow Royal Exchange Sale Room, on 14th November, 1834. The ship James M'Inroy, 450 tons burthen, Mr. John Cleland, commander, with a cargo of tea from Canton, to Glasgow merchants, arrived at Glasgow on 17th June, 1836, drawing fifteen feet water, at a spring tide. A few years ago the harbour was on one side, and only 730 feet long; it is now on both sides, 1,200 feet long on the south, and 3,340 on the north side of the river, and the trustees are busily and meritoriously engaged in extending the accommodation of the harbour, and improving the river. There are four dredging machines and two diving bells employed for that purpose. The trustees consist of the thirty-two members of the Town Council, and five merchants appointed by them. The trustees are about to apply to Parliament for additional powers, *inter alia*, instead of the extra trustees being appointed by the Town Council, it is proposed that the number be increased, and that they should be appointed by the public bodies.

REPORT OF THE FINANCE COMMITTEE ON 31ST AUGUST, 1839.

The Committee of the River Trust reported that the revenue for the year amounted to £45,826 13s. 6d., and the expenditure £35,694 17s. 4d., leaving an excess of revenue of £10,131 16s. 2d.; but there must be kept in view the outlay on property at Windmillcroft, sheds, &c., of £4,559 5s. 6d., and likewise the extra revenue of £2,503 16s. 7d. from the light-house trustees, leaving the real excess £3,058 14s., and on comparing the collection of this with last year, it appears there is an increase of £6,249 3s. 10d., viz.:

TABLE OF TONNAGE, DUES, &C.

	1838.			1839.			INCREASE.		
	£	s.	d.	£	s.	d.	£	s.	d.
Tonnage, Quay, Crane, and } Weighing Dues, . . . }	35838	17	1	41804	5	11	5965	8	10
Shed Dues, ... }	2286	19	8	2501	16	3	214	16	7
Ferry Dues, ... }	808	4	6	986	2	0	177	17	6
	38934	1	3	45292	4	2	6358	2	11
Deduct Expense of Collection,	1940	8	3	2004	7	3	63	19	1
	36993	13	0	43287	16	11	6294	3	10
To which add Rent of House } at Clydebank, . . . }	35	0	0	35	0	0	...	...	...
Also the Amount received of } an accumulated surplus from } the Light-House Trustees, }	...	...	...	2503	16	7	...	...	...
Leaving Net Revenue as above,				45826	13	6			

The gross debt of the Trust on 8th July, 1839, was £151,473 9s. 10d., from which £29,138 7s. 7d., property belonging to the Trust, is to be deducted. The debt owing by the Trustees, therefore, amounts to 122,335 2s. 3d.

The following is a comparative statement of the arrivals of *Sailing and Steam* vessels of this and the preceding year, showing an increase of this year on the former of 54,831 tons, and in the latter of 55,366 tons, viz.:

SAILING VESSELS.						STEAM VESSELS.
Year.	Coasting and River Vessels.	Foreign Arrivals.	Tonnage of Coasting, &c.	Tonnage of Foreign.	Total Tonnage.	Tons.
1837-8,	4466	137	192496	21975	214471	731028
1838-9,	5325	169	242633	26669	269302	766394
Increase,	859	32	50137	4694	54831	35366

ABSTRACT AMOUNT OF REVENUE.

Date.	Revenue.	Date.	Revenue.
1770, ...	£149 0 10	1820, ...	£6328 18 10
1780, ...	1515 8 4	1830, ...	20296 18 5
1790, ...	2239 0 4	1835, ...	31910 19 3
1800, ...	3319 16 1	1838, ...	36993 13 0
1810, ...	6676 7 6	1839, ...	43287 16 10

Dues were first levied on the Clyde in 1770. The dues on coals in 1809 were at the rate of 8d. per ton, afterwards repealed. By an Act, 6 Geo. IV., cap. 117, (18th June, 1825,) the river dues were raised one-third, viz., to 1s. 4d. per ton, with power to renew the duty on coals to the extent of 2d. per ton.

ABSTRACT, EXHIBITING THE COMPARATIVE DUES ON SAILING AND STEAM VESSELS.—DUES COLLECTED FROM SUNDRIES FROM 8TH JULY, 1835, TILL 9TH JULY, 1836, AS UNDER:—

Quay Dues on Sailing Vessels, ...	£2038 8 4	
Quay Dues on Goods by Sailing Vessels, ...	15707 17 4	
		£17746 5 8
Quay Dues on Steam Vessels, ...	5983 14 0	
Quay Dues on Goods by Steam Vessels, ...	11539 3 4	
		17522 17 4
Ferries, ...		1065 19 0
Paisley and Renfrew, ...		403 16 9
Forth and Clyde Canal, ...		687 1 3
		£37426 0 0
Deduct Commission and Expense of Collection, &c., ...		1848 4 0
		£35577 16 0

CONCERNING STEAM NAVIGATION.

The application of steam in propelling vessels had long engaged the attention of persons of mechanical genius. In 1785, Mr. Miller of Dalswinton, formerly in the navy, built a small vessel with two keels, between which he introduced propelling paddle wheels. The vessel was half-decked, capable of carrying ten or twelve persons. The engine was made and applied by Mr. Symington, engineer to the Wanlochhead Lead Mine Company. After numerous unsuccessful efforts, Mr. Miller, in 1788, made an experiment with his vessel on Dalswinton pond, in presence of Captain Grose, author of the "Antiquities of England," Mr. Robert Riddel of Glenriddel, the Rev. Mr. Lawson, minister of the parish, and his son, Mr. Archibald Lawson, late one of the magistrates of Glasgow, and others. This attempt also failed. In the meantime, Mr. Miller, nothing discomfited, built a vessel about 150 tons burthen, which he called the Experiment of Leith. This

vessel had two keels with paddles placed between them. On 25th March, 1789, I had the satisfaction of seeing this vessel, having sailed between her keels in the harbour of Bruntisland, Fifeshire. The prow was ornamented with fanciful ornaments, and her cabin tastefully fitted up, intended as a present for the King of Denmark. As the vessel did not come up to the expectation of the ingenious and indefatigable proprietor, it was also laid aside. Subsequent to this, Earl Stanhope, Lord Dundas, Mr. Symington, Mr. Thomson, and others, made several unsuccessful attempts.

The whole race of steam propelling projectors having retired, the field was occupied by Mr. Henry Bell of Glasgow. Having a turn for mechanics, and a desire to follow out what others had abandoned, he employed Messrs. John Wood & Co. of Port-Glasgow, to build a boat for him of 30 tons burthen, which he called the *Comet*, and having himself made an engine of three horse power, he applied the paddles. After several experiments, the *Comet* plied from Glasgow to Greenock, on 18th January, 1812, and made five miles an hour against a head wind. This was the first vessel successfully propelled by steam on a navigable river in Europe; now almost every river teems with them. It is not our intention to hold up our townsman as a person endowed with superlative mechanical talent; but, with no small share of native genius and unremitting enterprise, assisted by the Hon. Alexander Garden of Croy, lord provost, Mr. James Ewing of Levenside, one of the Members of Parliament for Glasgow, and myself, he was enabled to combat powerful influence, and make good his claim of being the first person in Europe who successfully propelled a vessel by steam on a navigable river.

As a mark of their approbation of his services, the trustees on the river Clyde granted Henry Bell an annuity of £50, with reversion to his spouse; and since his death, the said trustees, at the instigation of Mr. Lumsden of Yoker Lodge, aided by the private subscriptions of the citizens of Glasgow, erected an obelisk to his memory, on the rock of Dunglas, in the bosom of the Clyde, which witnessed achievements that have shed their benign influence over the civilized world.

The *Comet* having been lost at sea, Mr. Charles Atherton, civil engineer, procured the original engine made by Henry Bell, which had long lain in a watery bed. This engine, although of inferior workmanship, will be venerated by the antiquarian, as forming a striking contrast with those splendid engines that are now made at Glasgow and Greenock.

Now that that humble but meritorious individual has gone to "that bourne whence no traveller e'er returns," I have reason to feel more than ordinary gratification in having been an early adviser, and latterly instrumental in smoothing his path through life. Mr. Bell died at Helensburgh, on 14th March, 1830, aged sixty-three years, and was buried in the church-yard of Row.

For two or three years after the introduction of steam, the trade of carrying passengers was confined to the Clyde. At length Mr. David Napier, (now of London,) sole proprietor of the steam vessel, *Rob Roy*, was the first who established steam navigation on the open sea for carrying passengers and goods. He

also made the engines of the first steam vessel that plied from Glasgow to Liverpool and Dublin, and from Holyhead to Howth.

The progress of steam navigation on the Clyde since 1820, when there were only a few small steamers on the river, is truly wonderful,* as exemplified by the following table:—

CLYDE STEAM VESSELS WHICH SAILED FROM GLASGOW IN 1831 AND 1835.

ABSTRACT.

	1831.		1835.	
	Vessels.	Tonnage.	Vessels.	Tonnage.
Outsea Boats, ...	12	1947	18	3203
Goods and Passengers, . . .	8	600	11	834
Passengers, ...	25	1728	26	1927
Luggage, ...	7	431	8	470
Towing, ...	3	199	4	257
Total, ...	55	4905	67	6691

Since the first edition of this pamphlet went to press, several large timber and iron steam ships have been launched on the Clyde. But the most remarkable feature in the trade since the introduction of the steam propelling system in this neighbourhood, is, that the Government have fixed on a line of steam packets to ply between Glasgow, Liverpool, Halifax, and Boston, once a fortnight, for carrying her Majesty's mails. At present there are to be four ships, viz., *Britannia*, Captain Robert Ewing; *Caledonia*, Captain Edward C. Miller; *Acadia*, Captain Richard Cleland; *Columbia*, Captain Henry Woodruff, of 1200 tons burthen, and 440 horse power each. The *Britannia* was appointed to sail from Glasgow on 4th July, 1840. Passage—including provisions and wines—to Halifax, thirty-four guineas. Do. to Boston, thirty-eight guineas. Steward's fee, one guinea.

The steam ship, *Unicorn*, plies between Pictou and Quebec, in connection with the above vessels, carrying the mails and passengers to Canada.

These splendid and powerful ships belong to the Glasgow and Liverpool TIMBER Steam Ship Companies, Mr. Kinnaid, a Halifax gentleman, and two or three others, Government paying the owners for a number of years certain, a remunerating sum for carrying the mails.

* Mr. Canning, in one of his speeches to his friends in Liverpool, thus eloquently observes,—“That new and mighty power (new, at least, in the application of its might) which walks the water like a giant, rejoicing in its course, stemming alike the tempest and the tide, accelerating intercourse, shortening distances—creating, as it were, unexpected neighbourhoods, and new continuations of social and commercial relations, and giving to the fickleness of winds and the faithlessness of waves the certainty and steadiness of a highway upon the land.”

CONCERNING STEAM VESSEL INQUIRY.

In consequence of the explosion of the boiler of the steam vessel *Norwich*, plying to Yarmouth, in 1817, by which nine lives were lost, and many persons injured, a select Committee of the House of Commons was appointed to consider the means of preventing such accidents. A report was made to the House on 24th June, 1817. Another select Committee was appointed for a similar purpose on 14th October, 1831. As nothing effectual had been done in consequence of the reports of these Committees, the Lords of the Committee of the Privy Council on trade, on 2d January, 1839, the Right Hon. Poulett Thomson, President, (now Governor-General of the Canadas,) appointed Captain Pringle, R.E., and Josiah Parkes, Esq., civil engineer, to institute an inquiry into the causes of accidents in steam vessels, and the means of preventing the recurrence of them. The Commissioners having entered on the important duties assigned to them, visited the ports of Liverpool, Glasgow, Greenock, Leith, Newcastle, Shields, Sunderland, and Hull, at each of which, as well as at London, they communicated with the principal proprietors of steam vessels, with marine engine makers, ship builders, officers of the navy connected with steam navigation, masters of steam vessels, and others whose pursuits appeared to bear on the subject of their inquiries. They also examined many steam vessels, some plying, others undergoing repairs in their machinery or hulls; they also inspected vessels building, and machinery in progress of construction.

The Commissioners, in drawing up their report, recommended—

Firstly, a national system of registration. Secondly, periodical surveys of the hull and machinery of all steam vessels. Thirdly, the granting or withholding certificates of sea-worthiness, and of the right to ply with passengers.

A STATEMENT OF THE APPROXIMATE NUMBER, TONNAGE, AND POWER OF VESSELS
BELONGING TO THE MERCANTILE STEAM MARINE OF THE UNITED KINGDOM,
AND ITS DEPENDENCIES, END OF THE YEAR 1838, TAKEN FROM AN OFFICIAL DOCUMENT.

Total number of British and Irish steam vessels, including those registered in Guernsey, Jersey, and Man, 766; of these 484 may be considered as river steamers and small coasters, and 282 as large coasting and sea-going ships, ...		766
Registered tonnage, ...		87907
Tonnage of engine-rooms, &c., not registered at the custom-house, ...		69933
Total computed tonnage, ...		157840
Computed amount of horse power, ...		67250

The increase in 1837 over 1836 was 78, and that of 1838 over 1837, 59 registered vessels.

677 of the above vessels, which are registered, are of the following dimensions, viz.: 256 below 50 tons; 145, 50 to 100; 84, 100 to 150; 63 150 to 200;

76, 200 to 300; 41, 300 to 400; 10, 400 to 600; 1, 679; 1, 1053. The return of the 677 vessels is certified at the custom-house, London, on 11th February, 1839, by

(Signed) JOHN COVEY, *Registrar-General of Shipping.*

CONCERNING THE COMMERCE AND TRADE OF GLASGOW.

It appears that so early as the year 1546, there were some shipping belonging to the town, as the Privy Council of Scotland issued an order that the vessels belonging to Glasgow should not annoy those belonging to Henry VIII. of England, the Queen's uncle.

From an early period, salt formed one of the imports from France. On 3d February, 1639, James Laurie, skipper, made offer to the town of his boat load of French salt, at £6 Scots the water boll; on which Provost Patrick Bell convened the Town Council, when it was determined that they could not *afford* to purchase the salt unless the magistrates of *Dumbarton* took the half of it.

The Government having, in 1651, directed Commissioner Tucker to report on the revenue of the excise and customs in Scotland, that functionary gives a very concise account of the state of trade in Glasgow at that period. He states that "With the exception of the colleginors, all the inhabitants are traders: some to Ireland with small smiddy coals in open boats from four to ten tons, from whence they bring hoops, rungs, barrel staves, meal, oats, and butter; some to France with plaiding, coals, and herring, from which the return is salt, pepper, raisins, and prunes; some to Norway for timber. There hath likewise been some who ventured as far as Barbadoes, but the loss which they sustained by being obliged to come home late in the year, has made them discontinue going thither any more. The mercantile genius of the people is strong, if they were not checked and kept under by the shallowness of their river, every day more and more increasing and filling up, so that no vessel of any burthen can come up nearer the town than fourteen miles, where they must unlade, and send up their timber on rafts, and all other commodities by three or four tons of goods at a time, in small cobbles, or boats of three, four, or five, and none above six tons a boat. There is in this place a collector, a cheque, and four waiters. There are twelve vessels belonging to the merchants of this port, viz., three of 150 tons each, one of 140, two of 100, one of 50, three of 30, one of 15, and one of 12, none of which come up to the town—total, 957 tons."

In 1667 the Glasgow merchants fitted out a privateer to cruize against the Dutch. This war vessel, the *Lyon of Glasgow*, of sixty tons burthen, carried four pieces of ordnance, and was commanded by Captain Robert M'Allan.

According to a report of the Municipal Corporation Commissioners in 1834, the merchants of Glasgow, in the year 1699, had only fifteen vessels, tonnage, 1180. The foreign trade amounted to the sum of £20,500 Scots,—that the merchants retailed 20 tons of French wine, 20 butts of sack, 12 butts of brandy yearly, and 1000 bolls of malt monthly; that by the decay of trade 500 houses were uninhabited, and that those inhabited had fallen nearly a third of the rent; that the best houses did not exceed the rent of £100 Scots, and the worst £4 Scots, except some taverns.

Previous to the Union the foreign trade of Glasgow was chiefly confined to Holland and France. In 1706, Walter Gilmour of this city, cured and packed three hundred lasts of herrings, which he shipped to St. Martins in France, and brought brandy in return. The union between England and Scotland was concluded on 25th March, 1707. The terms were particularly obnoxious to the Scotch, and no where more so than in Glasgow, which has been so much benefited by it. The disturbances were carried on to a great height: addresses against the union were presented by almost every description of persons; Messrs. John Bowman, Dean of Guild, Robert Scott, Deacon of the Tailors, and John Stevenson, Deacon of the Cordiners, went to Parliament with the remonstrances of their fellow-citizens.

The Commission of the General Assembly appointed a fast to be kept on Thursday, 7th November, 1706, to implore divine assistance from the impending calamity, on which occasion, Mr. James Clark, minister of the Tron Church, Glasgow, preached from these words in Ezra viii. 21: "Then I proclaimed a fast there, at the river of Ahava, that we might afflict ourselves before our God, to seek of him a right way for us, and for our little ones, and for all our substance." After the discourse was finished, the preacher said, "Wherefore, up and be valiant for the city of our God." The people instantly rose, and being joined by the populace of other towns, they armed themselves, and burned the proposed articles of union. The most violent disputes took place in Parliament. Lord Belhaven, in deploring the situation in which the union would bring the Scotch nation, drew tears from the eyes of the audience. Addresses against it were presented to Parliament by the Convention of Royal Burghs, the Company trading to Africa and the Indies, as well as from councils, burghs, towns, and parishes, without distinction of whigs, tories, presbyterians, or episcopalians.

The union having opened the colonies to the Scotch, the merchants of Glasgow immediately availed themselves of the circumstance, but for a considerable time they carried on their trade in vessels chartered from the English ports; and it was not till the year 1718, that a ship built on the Clyde, the property of Glasgow merchants, crossed the Atlantic. Their mercantile genius was greatly crushed by the rebellion in the years 1715 and 1745; but having weathered the storm, they carried on a trade with the Colonies and America; and at length engaging extensively in a trade with Virginia and Maryland, soon made their city a mart

for tobacco, and the chief medium through which the farmers general of France received their supplies of that article.

In 1775, forty-two Glasgow merchants imported 57,143 hhds. of tobacco into Clyde, each averaging 1000 lbs. The following are the names of those who imported above 1000 hhds.:

	Hhds.		Hhds.
William Cunningham & Co. .	9888	Dinwiddie, Crawford, & Co. .	1771
John Glassford & Co. . . .	9742	James Ritchie & Co. . . .	1531
Alexander Spiers & Co. . .	9150	Dunlop, Crosse, & Co. . .	1306
Henderson, M'Caul, & Co. .	2426	Donald, Scott, & Co. . . .	1302
Colin Dunlop & Son, . . .	2220	James & Robert Buchanan, .	1229
Oswald, Dennistoun, & Co. .	1935	George & Andrew Buchanan,	1109
Bogle & Sommerville, & Co. .	1890		

The American war put a stop to this traffic, by which many of the citizens of Glasgow had amassed wealth. The war may be said to have commenced on 19th April, 1775, when 65 British soldiers were killed and 180 wounded at Lexington. When the news of this reached Glasgow, the Magistrates called a public meeting, when resolutions were entered into to support the government. A corps of 1000 rank and file, afterwards the 83d regiment of foot, was raised by voluntary subscription. To give countenance to recruiting the corps, which was termed the Glasgow Regiment, and to show their determination to oppose the Americans, a great number of the principal inhabitants formed themselves into a recruiting party. Mr. John Wardrop, a Virginia merchant, beat a drum; Mr. James Finlay, father to Mr. Kirkman Finlay of Castle Toward, played the Irish bagpipe; while other eminent merchants and citizens performed the duties of fifers, or carried broadswords, colours, or other warlike ensigns. Mr. Cunningham of Lainshaw, Mr. Spiers of Elderslie, and others hired their ships as transports, but Mr. Glassford of Dugaldston disapproving of the warlike preparations, laid up his ships in Port-Glasgow harbour.

It may gratify the curious to know the sources from which the funds for this regiment were procured. They were as follows:—

CONTRIBUTIONS FROM SOCIETIES.

City of Glasgow, . . .	£1000 0	Fleshers and Members, .	£350 0
Trades' House, . . .	500 0	Gardeners do.	105 0
Hammermen and Members,	552 7	Barbers do.	150 0
Tailors do.	520 11	Coopers do.	157 0
Cordwainers do.	434 12	Dyers do.	49 10
Maltmen do.	648 0	Procurators, ...	243 12
Weavers do.	559 0	Physicians and Surgeons, .	105 0
Wrights do.	535 13	Cape Club, ...	62 0
Skinners do.	164 12	Buchanan Society; . . .	50 0
Bakers do.	293 18	Old N. Quarter Weavers, .	50 0
Masons do.	100 0		

CONTRIBUTIONS FROM INDIVIDUALS.

Lord Fred. Campbell, M. P.	£500 0	William Clark, ...	£52 10
Robt. Donald, Lord Provost,	105 0	Richard Marshall, ...	50 0
Hon. Miss Leslie, ...	200 0	Ronald Crawford, ...	50 0
Peter Murdoch, ...	105 0	William Donald, ...	50 0
Robert Findlay, jun. . . .	105 0	Jonathan Anderson, ...	50 0
James Brown, sen. . . .	105 0	James Jackson, ...	50 0
George Crawford, ...	100 0	Peter Blackburn, ...	50 0
William French, ...	100 0	John Robertson, ...	50 0
Patrick Colquhoun, ...	100 0	John Laurie, ...	50 0
George Miln, ...	100 0	John Duguid, ...	50 0
John Clark, ...	100 0	Andrew & John Stirling, .	50 0
George Miller, sen. . . .	100 0	James M'Dowall, ...	50 0
John Orr, ...	52 10	Dugald Thomson, ...	50 0
James Finlay & Co. . . .	52 10	John Wardrope, ...	50 0
Andrew Houston, ...	52 10	James M'Gregor, ...	50 0

The others are under £50. Total sum subscribed, £10,212 15s. The regiment was fully equipped in the spring of 1778.

The West India trade of Glasgow from the period of the Union continued to be of small extent, but gradually improving. In 1775 the imports were as follows:—Sugar, 4621 hhds. and 691 trs., Rum, 1154 puns. and 193 hhds., Cotton, 503 bags. From this time the trade increased rapidly, as appears from the following excerpt from the custom-house books of the imports into the Clyde:—In the year ending 5th January, 1815, a little before the battle of Waterloo, the imports were—Sugar, 540,198 cwt.; Rum, 1,251,002 gallons; Cotton-Wool, 6,530,177 lbs. The import duties of these and other articles amounted to £563,058 2s. 6d. The produce was carried in 448 ships, containing 79,214 tons, and employing 4868 men in navigating them. The export duties during the same year to America, the West Indies, and Europe, amounted to £4,016,181 : 592 ships, 9350 tonnage, and 6476 men were employed in this traffic. The increase of the following custom duties is much larger than the most sanguine could have anticipated.

AMOUNT OF CUSTOM DUTIES COLLECTED AT GLASGOW SINCE 1811.

Years.	Duties.	Years.	Duties.
1812, ...	£3,124 2 4½	1826, ...	£78,958 13 8½
1813, ...	7,511 6 5½	1827, ...	71,922 8 0¼
1814, ...	7,419 12 8	1828, ...	74,255 0 1¼
1815, ...	8,300 4 3	1829, ...	70,964 8 4
1816, ...	8,424 9 2	1830, ...	59,013 17 3
1817, ...	8,290 18 1	1831, ...	72,053 17 4
1818, ...	8,402 1 3	1832, ...	68,741 5 9
1819, ...	8,384 3 4	1833, ...	97,041 11 11
1820, ...	11,000 6 9	1834, ...	166,913 3 3
1821, ...	11,428 19 0	1835, ...	270,667 8 9
1822, ...	16,147 7 7	1836, ...	314,701 10 8
1823, ...	22,728 17 2½	1837, ...	389,702 2 10
1824, ...	29,926 15 0	1838, ...	394,144 11 8
1825, ...	41,154 6 9	1839, ...	468,974 12 2

The bonding system in Glasgow commenced in 1817, but was not in full operation till 1820. The bonding of tobacco took place in 1833, and tea in 1834, but they also required some time before the duties were greatly increased.

FIRST SHIP FROM A SCOTCH PORT TO INDIA.

The trade to the East Indies having been laid open, Messrs. James Finlay & Co. of this city, despatched the ship *Earl of Buckinghamshire*, 600 tons burthen, to Calcutta, in the spring of 1816, which was the first vessel from Scotland bound to India direct. This enterprising firm carry on trade with almost every part of the world where ships are allowed to enter.

TIMBER TRADE.

There is one mercantile house here which possesses ten times more tonnage than all the merchants of Glasgow did one hundred years ago. Messrs. Pollok, Gilmour, & Co., who are chiefly engaged in the North American timber trade, are owners of twenty-one large ships, register 12,005 tons, and navigated by 502 seamen. They have eight different establishments that ship annually upwards of SIX MILLIONS cubic feet of timber, to cut and collect which, and to prepare it for shipment, requires upwards of FIFTEEN THOUSAND MEN, and SIX HUNDRED HORSES AND OXEN in constant employment.

SOFT GOODS TRADE.

Messrs. James and William Campbell & Co. were the first in this city to occupy as a warehouse for the retail of soft goods the upper flat of a tenement instead of shops on the street, or ground floor; and although the practice of having retail places of business on the second floor has since become pretty general in Glasgow, it is still a peculiarity of this city. Messrs. Campbell, too, were the first who successfully resisted the practice which had previously obtained very generally in Glasgow in their line of business, of what in Scotch phrase is termed "prigging," or deviating from the first price asked for goods sold in retail. They commenced business in 1817, in the Trades' Land, head of Saltmarket-Street, from which they removed, in 1823, to premises built by themselves, which they still occupy, in Candleriggs-Street.]

This establishment, now embracing the wholesale as well as the retail business, is the largest of the kind out of London, containing 4,842 square yards of flooring, or rather more than an imperial acre. In these premises the public are supplied with nearly every description of goods of woollen, linen, cotton, and silk manufacture, and the arrangements are such that purchasers of the smallest quantities for private use are equally attended to and accommodated with those who make the most extensive purchases for either home or foreign consumpt. One hundred and thirty-four persons are employed in the sale and counting-house department of these warehouses. The company employ from two thousand five hundred to three thousand female sewers in different parts of the country, but chiefly in Ayrshire.

Although Messrs. Morrison, and Messrs. Leaf of London, and probably some other houses, turn a larger sum annually than Messrs. Campbell, in consequence of dealing largely in the more valuable description of goods, it is understood they do not serve so many customers. The following is a note of the respective amounts of three years of the early, and three years of the latter sales, which not only show the progressive increase of Messrs. Campbell's business, but exhibits a fair criterion of the rapid increase and commercial improvement of the city of Glasgow.

In 1818, ... £41,022 6 4	In 1837, ... £500,515 6 1
In 1827, ... 183,385 6 10	In 1838, ... 559,245 17 10
In 1832, ... 312,207 5 8	In 1839, ... 626,982 3 4

CHEMICAL DISCOVERIES.

Among the numerous practical chemists with which this city abounds, Mr. Charles MacIntosh of Campsie is the most conspicuous. Science is deeply indebted to him for the splendid discoveries he has made. By his successful experiments during the last forty years, he has greatly reduced the price of various articles used in the manufactures.

CHEMICAL WORK AT ST. ROLLOX.

In 1800, Messrs. Tennant, Knox, & Co., established a chemical work at St. Rollox—now carried on under the firm of Charles Tennant & Co.—for the manufacture of sulphuric acid, chloride of lime, soda, and soap. This manufactory extends over ten acres of ground, and within its walls there are buildings which cover 27,340 square yards of ground. In the premises there are upwards of 100 furnaces, retorts, or fire places. It may be said, without exaggeration, that the establishments of Messrs. Pollock, Gilmour, & Co. and Charles Tennant & Co., are unequalled in the world.

CONCERNING THE POST OFFICE.*

It has been very appropriately said that “the daily regularity of the mails is one of the triumphs of modern civilization. The inhabitants of the remote Orkneys or Shetlands can calculate on receiving the news of the metropolis (and all that is gathered during the day from every part of the world) in little more than a few hundred hours. The highlander, whose country a century ago was nearly as a ‘land unknown,’ as is now the interior of Africa, or Australia, obtains ample intelligence in as many days as it once took weeks, or even months for

* The following statement, from a Parliamentary paper, exhibits the comparative amount of postage in the principal towns in Great Britain and Ireland, in 1834:—London £660,411 11s. 4d.; Liverpool, £77,333 1s. 4d.; Dublin, 70,344 1s. 1d.; Manchester, £60,621 12s. 6d.; Edinburgh, £41,680 16s. 9½d.; Glasgow, £37,483 3s. 4½d.; Bristol, £33,210 17s. 8d.; Birmingham, £20,258 1s. 7d.; Leeds, £20,670 6s. 5d.; none of the other towns amounted to £15,000.

vague rumours to reach the border. But notwithstanding the highly improved state of the present mail system, the increase of the population, and of trade and commerce, demand additional facilities of communication."

It would appear that the post office revenue in Scotland, about the time of the Revolution, was useless in a pecuniary point of view. In 1698, King William III. made a grant of the whole post office revenue of Scotland to Sir Robert Sinclair of Stevenson, with a pension of £300 per annum, for keeping up the post. Sir Robert, after due deliberation, gave up the grant as disadvantageous.

The authorities of Edinburgh and Glasgow, feeling a defect in their correspondence, made application to Parliament on 7th November, 1707, for a riding post between these cities.

An Act of Parliament was passed in 1839, for reducing all postages in Great Britain and Ireland to one penny per letter, not exceeding one half-ounce. On 5th December, 1839, the postage was reduced to fourpence; and on 10th January, 1840, to one penny.

REVENUE OF THE GLASGOW POST OFFICE.

Year.	Revenue.			Year.	Revenue.		
1781, ...	£4,341	4	9	1833,.....	£36,481	0	0½
1810, ...	27,598	6	0	1834,.....	37,483	3	4½
1815, ...	34,784	16	0	1835,.....	39,954	4	6
1820, ...	31,533	2	3	1836,.....	42,370	0	11½
1825, ...	34,190	1	7	1837,.....	43,029	6	8½
1830, ...	34,978	9	0½	1838,.....	44,393	0	4½
1831, ...	35,642	19	5	1839,.....	47,527	7	7
1832, ...	36,053	0	0				

CHAMBER OF COMMERCE.

The first Chamber of Commerce in this country was instituted in this city in 1783, under the auspices of Mr. Patrick Colquhoun. The services which this enlightened and public-spirited citizen rendered to Glasgow, and to the country, were very important and highly valued. No civilian connected with this city ever merited or received so many marks of public approbation. Mr. Colquhoun was Lord Provost of Glasgow in the years 1781, 1782, 1783; and in 1797, the University of Glasgow conferred the degree of Doctor in Laws on him. In 1783, the Convention of Royal Burghs voted him a piece of plate for eminent mercantile services; and in 1785, the Cotton Manufacturers presented him with four pieces of plate. In 1788, the Governor and Council of the Forth and Clyde Navigation a piece of plate, value £100. In 1789 Mr. Colquhoun settled in London. He was a Deputy-Lieutenant of Middlesex, and for twenty-five years a Police Magistrate of that and the adjoining counties. He was constituted Resident and Consul-General for the free Hanseatic republics of Lubeck, Bremen,

and Hamburg, as also for several colonies. In 1795, he published his work on the Police, and subsequently his "Treatise on the Wealth, Power, and Resources of the British Empire," a work of great merit and research, which went through several editions. In 1800 the West India Merchants presented him with plate to the value of £500, and immediately thereafter the Russian Company requested his acceptance of plate to the value of 100 guineas.

Mr. Colquhoun was the first chairman; Mr. James M'Gregor, father-in-law to Mr. Watt, the improver of the steam engine, the first deputy-chairman; and Mr. Gilbert Hamilton, brother-in-law to Mr. Watt, was the first secretary. Mr. Hamilton, who held the office of secretary for twenty-five years, namely, from the formation of the Chamber till his death in 1808, was a talented and highly respected merchant, and Lord Provost in the years 1792 and 1793. His portrait is hung up in the hall of the Chamber. Mr. Dugald Bannatyne is the only original member of the Chamber now alive. He was elected secretary at Mr. Hamilton's death, and has held the office for twenty-seven years, with honour to himself, and great advantage to the Chamber; and such was the respect for their talented and much esteemed secretary, that when he resigned his office from bodily infirmity, on 5th January, 1836, the Chamber requested him to sit for his portrait, which now hangs in their hall. Mr. James A. Anderson, banker, was unanimously elected to succeed him, and it is no small honour to be selected to follow two such persons.

The Chamber was constituted for the protection and encouragement of trade, and incorporated by Royal Charter, *inter alia*, for the purpose of keeping a watchful eye on whatever might be supposed to affect the commercial interests of Glasgow and its neighbourhood. The great outlines of the business committed to the charge of the Chamber of Commerce, were,—To consider all plans and systems for the protection and improvement of trade;—to regulate all matters respecting any branch of trade which may be submitted to the directors;—to read and discuss all public and private memorials of members of the Chamber requesting aid in any matter regarding trade or manufactures;—to afford aid to members who may apply for assistance in negotiating any business, whether local, or of a nature which requires the weight and influence of the directors in making application to the Board of Trustees, to the king's ministers, or to Parliament;—and other matters of general import respecting trade. The Chamber now consists of 273 members, many of them deeply versed in the science of commerce.

CONCERNING THE FORTH AND CLYDE NAVIGATION.

The increase which began to take place, during the middle of last century, in the trade of Glasgow, soon pointed out to her citizens the advantages which would be derived from an inland navigation, which might connect the city with the east coast. Accordingly, in 1768, the necessary sum was raised, and an Act of Parliament obtained; and on 10th June in that year, the first spadeful of earth for the formation of the canal was dug out by Sir Lawrence Dundas. On 3d September, 1773, the navigation was completed and filled with water as far as

Kirkintullock. On 10th November, 1775, it was rendered navigable to Stockingfield; and in November, 1777, the collateral cut to Glasgow was completed as far as Hamilton hill, where a large basin was made for the reception of vessels. The operations for extending the navigation from Stockingfield to the river Clyde at Bowling Bay, were commenced in July, 1786, and completed in July, 1790, and the canal opened from sea to sea. The ceremony of joining the eastern and western seas was performed by Mr. Archibald Spiers of Elderslie, chairman of the committee, assisted by Mr. Robert Whitworth, at that time chief engineer, by launching a hogshead of water of the Forth into the Clyde. This was done in the presence of the committee of management and the magistrates of Glasgow, amid the acclamations of a vast crowd of spectators. The basin at Hamilton hill having been found to be at too great a distance from Glasgow, the collateral cut was continued to Port-Dundas, within half-a-mile of that city, and a large basin was completed in November, 1790.

This great inland navigation, which was twenty-two years in being completed, proved of exceedingly difficult execution, rocks, precipices, and quicksands, having all to be encountered in its course. In some places it runs through a deep moss, while in others it is banked twenty feet high. It crosses many rivulets and roads, as well as two considerable rivers, the Luggie and the Kelvin. The bridge over the latter, which consists of four arches of great height, and carries the canal over a deep valley, cost £8,509. The canal is supplied with water by eight reservoirs, covering upwards of 72 acres of ground, and containing 24,902 lock-fuls of water. In its course it passes over ten aqueduct bridges, and thirty-three smaller ones, and there are thirty-three draw-bridges over it.

The pecuniary concerns of this great undertaking have been on the increase for a number of years by-past. Mr. Kirkman Finlay of Castle Toward has held the office of Governor, with much acceptance, for many years.

SUMMARY VIEW.

	Miles.
Extreme length of the Navigation, from Lock No. 1, on the River Forth,	
to Lock 39 on the River Clyde, ...	35
Extreme length of the collateral cut to Glasgow, ...	2 $\frac{3}{4}$
	37 $\frac{3}{4}$
From Port-Dundas to Monkland Canal Basin, near St. Rollox, ...	1
Total length of Canal, ...	38 $\frac{3}{4}$
From Grangemouth to Stockingfield, ...	26
From Stockingfield to Port-Dundas, ...	2 $\frac{3}{4}$
	28 $\frac{3}{4}$
From Port-Dundas to Monkland Basin, ...	1
Total length from Grangemouth to Monkland Canal Basin, ...	29 $\frac{3}{4}$

	Feet.
Rise from the East Sea to the summit level of the Canal at Wyndford Lock, No. 20, ...	156
Descent from the summit level of the Canal to the Clyde at Bowling Bay, commencing at the great Aqueduct on the River Kelvin, ...	150
The Forth at the Sea Lock No. 1, is therefore lower than the Clyde at Bowling Bay, ...	6

There are twenty locks on the stretch between Grangemouth and Port-Dundas, and nineteen between the great Aqueduct and Bowling Bay.

The head level runs from Wyndford to Port-Dundas.

Medium width of the surface of the Canal, ...	56
Medium width at bottom, ...	27
Depth throughout the whole, ...	9

Vessels of 68 feet, 6 inches keel, 19 feet 9 inches beam, and drawing 8 feet 9 inches of water, can pass through it.

Length of the whole mason work of each Lock, ...	133
Length of the Locks between the gates, ...	74
Work between the walls, ...	20
Fall of each of the Locks, ...	8

In the stretch from Grangemouth to Port-Dundas, 16 of the 20 Locks are within 4 miles of the sea Locks; 10 of these adjoin No. 16; and from that point to Port-Dundas there are four other Locks.

MONKLAND CANAL.

This canal affords a cheap communication between the City of Glasgow and the collieries in the parishes of the Old and New Monkland, distant about twelve miles. The undertaking was first suggested to the magistrates in 1769. The concern having been unproductive, it was brought to sale, and purchased by Messrs. William Stirling and Sons of this city. These gentlemen, on acquiring the property, proceeded to complete the canal; and in 1799, in conjunction with the proprietors of the Forth and Clyde Navigation, a junction was made between the Monkland and Forth and Clyde Navigation.

GLASGOW, PAISLEY, AND ARDROSSAN CANAL.

The reduction of the expense of land carriage from Glasgow to the west coast, through the fertile counties of Renfrew, Lanark, and Ayr, abounding with coal

and limestone, was long a desideratum. The scheme of making a navigable canal from Glasgow to Ardrossan, by Paisley, and Johnstone, and forming a harbour at Ardrossan capable of containing small ships of war and the largest class of West Indiamen, was suggested by the Earl of Eglinton in 1805. His lordship's patriotic views were seconded by a number of subscribers, who were formed into a company, under the designation of the Company of Proprietors of the Glasgow, Paisley, and Ardrossan Canal. The operations on the canal commenced in May, 1807, and the navigation opened between Glasgow and Johnston on 4th October, 1811.

UNION CANAL.

The Union Canal was begun on 3d March, 1818. It is $31\frac{1}{2}$ miles in length, from Port Hopetoun near Edinburgh, to Port Downie near Falkirk. The navigation for 10 miles west from Port Hopetoun was opened on 22d March, 1822, and to Port Downie early in May thereafter. The canal is on a level line for 30 miles from Port Hopetoun; the remaining distance is occupied by 11 locks, each 10 feet deep; so that the Union canal, at the head of the locks, is 110 feet above the Forth and Clyde Navigation.

There are swift passage boats on all these canals.

RAILROAD FROM EDINBURGH AND LEITH TO GLASGOW.

This important undertaking has at length been gone into, and great efforts are making towards its completion. As a paper is to be read at this meeting of the Association on the subject of railroads connected with Glasgow, it is unnecessary to enter here into detail.

CONCERNING STAGE COACHES.

Stage coaches were first introduced into Scotland in 1678. On 6th August, in that year, Provost Campbell and the other magistrates of Glasgow entered into an agreement with William Hume of Edinburgh, that he should run a coach between Edinburgh and Glasgow. The coach was drawn by six horses. It left Edinburgh on Monday morning, and (God willing) returned on Saturday night. It does not appear how long this coach kept the road, but in 1763, with the exception of two coaches which ran between Edinburgh and Leith, a distance of about two miles, there was only one stage coach in Scotland. About this time a heavy coach, drawn by four horses in good weather, and six in bad, commenced running between Edinburgh and Glasgow three times a-week. In a short time it ran every day, and was from eleven to twelve hours on the road. A heavy coach having run for about thirty years, was succeeded by diligences or chaises with two

horses. These vehicles were between seven and eight hours upon the road. The diligences were in their turn succeeded by coaches drawn by four horses. The first mail coach from London to Glasgow, arrived at the Saracen's Head, on Monday, 7th July, 1788; and such was the interest excited on that occasion, that Mr. Buchanan, of the Saracen's Head, (who had an interest in the coach,) and a crowd of horsemen, went out as far as Clyde Ironworks to welcome her approach. Mr. Bain, who has been one of the contractors for carrying the London mail for half a century, viz. since 1790, states that for many years there was such a scarcity of passengers, that the contractors lost money by it. At that period the mail was sixty-three hours on the road; and such has been the effect of recent improvements, that on 22d May, 1839, the mail, by the aid of railroads, occupies now only twenty-nine hours and eleven minutes between London and Glasgow. On Thursday 10th January, 1799, Mr. John Gardner, of the Star Inn, Glasgow, started the Royal Telegraph coach,* between Glasgow and Edinburgh, with four horses. It performed the journey of forty-two miles in six hours. The example was soon followed by others, and the distance is now run frequently in little more than four hours.

The following curious information is taken from Mr. Dugald Bannatyne's scrap-book:—"The public have now been so long familiarised with stage coach accommodation, that they are led to think of it as having always existed. It is however, even in England, of comparatively recent date. Mr. Andrew Thomson, sen., told me that he and Mr. John Glassford went to London in the year 1739, and made the journey on horseback—that there was no turnpike road till they came to Grantham, within one hundred and ten miles of London—that up to that point they travelled upon a narrow causeway, with an unmade soft road upon each side of it—that they met from time to time strings of pack horses from thirty to forty in a gang, the mode by which goods seemed to be transported from one part of the country to another. The leading horse of the gang carried a bell, to give warning to travellers coming in an opposite direction, and he said when they met these trains of horses, with their packs across their backs, the causeway not affording room to pass, they were obliged to make way for them, and plunge into the side road, out of which they sometimes found it difficult to get back again upon the causeway."

CONCERNING INTERCOURSE WITH GLASGOW.

The intercourse with Glasgow by coaches, steam boats, track boats, and railroads is so great that it almost exceeds belief. As several of the coaches and

* It appears from Law's Memorials, p. 126, that "the Earle of Dundonald, with his coach, and himself, and his lady, going to the marriage of his grandchild to the Lord Montgomery, from Paisley to Eglinton, an. 1676, in December, was stoppt by the way by a witch: the horses of the coach refused to go by the door, and turned their heads homeward."

steam boats depart and arrive more than once every lawful day, and the mail coaches every day, the following may be taken as a low average of passengers by stage coaches and steam boats, while the others are from the books of the respective companies. In 1834 I published the names and designations of sixty-one stage coaches which arrived and departed during 313 lawful days, each averaging twelve passengers. This gave 458,232 in the year; by thirty-seven steam boats, twenty-five passengers each, 579,050; by the swift boats, on the Forth and Clyde navigation and Union canal, 91,975; by the light iron boats on the Paisley canal, 307,275; by the boats on the Monkland canal, 31,784; and by the Glasgow and Garnkirk railroad, 118,882. These together make the gross number of persons passing and repassing to Glasgow yearly amount to one million five hundred and eighty-seven thousand one hundred and ninety-eight (1,587,198.) A number of these passengers leave Glasgow and return to it on the same day.

The increase of passengers by the canal boats and railroads (exclusive of coaches and steam boats) will be seen by the following statement, viz. in 1836, by the swift steam boats on the Forth and Clyde navigation and Union canal, 198,461, by the Paisley canal, 423,186, by the Monkland canal, one boat making only one trip per day, 31,400, by the Glasgow and Garnkirk railroad, 146,296, showing an increase in two years of 249,427 passengers. When the railroad between Edinburgh and Glasgow is opened, it is contemplated there will be a great increase of passengers.

RESPECTING WEIGHTS AND MEASURES.

Prior to 1821 the Weights and Measures used in this city were very defective. At that period the authorities requested me to prepare an exemplification of all the weights and measures, and a specification of the particular weights and measures by which commodities were sold according to established usage. Having complied with this request, the magistrates and municipal officers simultaneously examined the weights and measures used in merchandize within the city, when it was found that out of 13,456 measures examined, 10,319 were sufficient, and 3,137 deficient; and of 8,199 weights examined, 7,032 were sufficient, and 1,167 deficient. The deficient weights and measures were all confiscated, and several of the dealers fined.

An act of parliament having been passed for introducing imperial weights and measures, the magistrates of Glasgow, on 28th January, and the sheriff of Lanarkshire, on 22d February, 1826, nominated and requested Dr. Meikleham, professor of natural philosophy in the university of Glasgow; Dr. Thomson, professor of chemistry in said university; Dr. Ure, professor of natural philosophy in the Andersonian university; Mr. Chrichton, philosophical instrument maker, and me, to ascertain the difference between the various local weights and measures and the imperial standards. Having complied with the requisition, we gave in a detailed report, which was verified on oath before Mr. George Burns, one of his

majesty's justices of the peace for the county of Lanark. The report was then confirmed by the verdict of a jury.

At a meeting of his majesty's justices of the peace for the county of Lanark held at Hamilton on 24th October, 1834, his grace the Duke of Hamilton and Brandon, lord lieutenant of the county, in the chair,—The meeting taking into their consideration, that by an Act 4 and 5 Gul. IV. Cap. 49, it is enacted, “that in Scotland, from and after the first of January, one thousand eight hundred and thirty-five years, the fair prices of all grain in every county for ascertaining the value of ministers' stipends, teinds, &c., shall be struck by the imperial quarter, and all other returns of the price of grain shall be set forth by the same, without any reference to any other measure whatever.” And having full confidence in the science and skill of Doctors Meikleham, Thomson and Cleland, the meeting did, and hereby do appoint and request these gentlemen to ascertain the comparative contents of the measures aforesaid, and to report the result on oath. The meeting taking into their consideration the numerous and important interests which will be effected by the present act, are desirous to obtain the assistance of some person of skill and experience in such matters, the better to enable them to put the act in execution; and having every confidence in the abilities and fidelity of Dr. James Cleland of Glasgow, one of the magistrates for the county, on the motion of his Grace the chairman, the meeting unanimously requested that gentleman to accept of an honorary superintendence over the functionaries appointed by the Act.

Having accepted the appointment, I proceeded at maturity to adjust the numerous *standards* for the various weights and measures of the county of Lanark, (which includes the city of Glasgow;) a certificate of accuracy, with my signature was then engraved on each of the standards, viz., a yard bed—liquid measures, two gallons down to a half-gill—weights, fifty-six pounds down to eight drams—measures for the sale of grain, a bushel down to the eighth part of a peck.

His majesty's justices of the peace for the counties of Renfrew and Dumbarton, and the magistrates of the burghs of Paisley, Greenock, Dumbarton, Kirkintilloch, Hamilton, Calton, and Lesmahago, requested me to procure *standards* for their weights and measures, same in number and quality as those for the county of Lanark, and city of Glasgow, and to adjust and verify them in like manner. Having readily complied with this request, I adjusted and authenticated them in the same manner as I had done the Lanarkshire standards. Unpleasant as it ever must be to speak of one's self, I trust that I shall be excused when I unaffectedly acknowledge that I feel proud of the confidence thus reposed in me by the magistrates of those counties and burghs in a matter of so much importance to them. The following is a copy of three of the numerous tables produced by the reporters.

Table No. 1 and No. 2 has reference to ministers' stipends, teinds, &c.

CONCERNING MEASURES OF CAPACITY.

The unit, as well for all sorts of liquids as for grain, is the imperial standard gallon, containing equal to 277.274 cubic inches. This measurement is equal to ten pound avoirdupois weight of distilled water.

The measure denominated a QUARTER of grain contains 8 imperial bushels, or 32 pecks, or 64 gallons, or 256 quarts, or 512 pints, or 2048 gills.

The Linlithgow chalder for wheat, pease, and beans, is equal to 63.8862656 imperial bushels, or very nearly 63 bushels 7 gallons and one-tenth of a gallon.

The Linlithgow chalder for oats, barley, bere, and malt, is equal to 93.198784 imperial bushels, or very nearly 93 bushels 1 gallon and three-fifths of a gallon.

The Linlithgow wheat firloft for the sale of wheat, pease, and beans, is equal to 2214 cubic inches and one quarter of an inch (2214.2539).

The Linlithgow firloft for the sale of oats, barley, bere, and malt, is equal to 3230 cubic inches and one-fifth of a cubic inch (3230.2).

Find that 8.01424... firlofts for the sale of wheat, pease, and beans, are equal to one imperial QUARTER—that is, that the imperial quarter contains 2 bolls and about two-ninths of a lippie.

Find that 5.49363... firlofts for the sale of oats, barley, bere, and malt, are equal to one imperial QUARTER—that is, that the imperial quarter contains one boll, one firloft, one peck, three lippies, and about nine-tenths of a lippie.

Prior to the introduction of imperial liquid measures, the following were used in Glasgow, viz., wine gallon, containing 231 cubic inches; the Scotch pint, or Stirling jug, from which oil, spirits, vinegar, and sweet milk were retailed, contained 105 cubic inches; and the Scotch pint for the sale of ale, beer, porter, and butter-milk, containing $111\frac{9}{16}$ cubic inches.

Table No. I.

A Linlithgow firloft, for the sale of oats, barley, bere, and malt is equal to 1.456231, that is, one bushel and .456231 decimal parts, or very nearly one bushel and $\frac{5}{11}$ of a bushel, and therefore

One Chalder	=	93.198784..	bushels.
One Boll	=	5.824924..	do.
One Firloft	=	1.456231...	do.
One Peck	=	0.364058..	do.
One Lippie	=	0.091014...	do.

4 firlofts make a boll, and 16 bolls a chalder, for wheat, barley, oats, &c.

Table No. II.

FOR OATS, BARLEY, BERE, AND MALT.

Linlithgow Chalders.		Imperial Bushels.	Bushels.	Gallons.
1	=	93.198784	or 93	$1\frac{3}{5}$
2	=	186.397568	or 186	$3\frac{1}{6}$
3	=	279.596352	or 279	$4\frac{3}{4}$
4	=	372.975136	or 372	$6\frac{1}{8}$
5	=	465.993920	or 465	$7\frac{19}{20}$
6	=	559.192704	or 559	$1\frac{1}{2}$
7	=	652.391488	or 652	$3\frac{1}{8}$
8	=	745.590272	or 745	$4\frac{3}{4}$
9	=	838.789056	or 838	$6\frac{1}{8}$
10	=	931.987840	or 931	$7\frac{9}{10}$
Reported by (Signed)				WM. MEIKLEHAM. THOMAS THOMSON. JAMES CLELAND.

SCOTCH ACRE RAISED FROM THE IMPERIAL CHAIN AND SCOTCH CHAIN.

Agreeably to the verdict returned by the jury on 5th January, 1827, the legal Scotch chain in the county of Lanark is now declared to be 74.1196 imperial feet in length, and the Scotch acre raised from such chain (now the legal standard in the county) therefore contains imperial square yards, 6104.127893511

The length of the chain used prior to the decision of the jury being 74 imperial feet in length, without a fraction, the Scotch acre raised from that chain was less than that adopted by the jury, ... 6084.444444444

The new standard is therefore more than the old by square yards, 19.683449067
The English acre contains 4840 imperial square yards.

CONCERNING THE SUPPLY OF WATER.

Till the formation of the Water Companies the inhabitants of this city were but indifferently supplied from public and private wells. About seventy years ago the magistrates and a few of the inhabitants procured a plan from Mr. James Gordon for supplying the city with water from Whitehill, but the capabilities failing, the scheme was given up. In 1794, Messrs. John Stirling of Cordale, James Hopkirk of Dalbeth, and Henry Glassford of Dugaldston, were appointed a committee of inhabitants for bringing in water to the city by gravitation. These gentlemen employed the late Mr. M'Quisten, who surveyed the grounds in the

neighbourhood, and produced plans and estimates, accompanied with a description of the springs which he met with, but the scheme being too expensive it was dropped. Having been requested to assist the committee, in adjusting the engineer's claims, I found some parts of his plan very ingenious, but subject to failure from the precarious nature of the springs. In the meantime the city was supplied by 29 public and a few private wells. In 1804, Mr. William Harley erected a reservoir in West Nile-Street, which he supplied with spring water from Willow Bank, and distributed it through the streets from square cisterns on four wheeled carriages.

The perseverance and success of an individual induced a number of the principal inhabitants to enter into a subscription for supplying the city with filtered water from the Clyde. In 1806, the subscribers procured an act of parliament, incorporating them under the designation of the "Glasgow Water Company." Parliamentary powers were committed to a committee for carrying the Act into execution. In 1808, the Cranstonhill company was incorporated; and lately an act of parliament has been procured for uniting these companies. From their commencement till 31st May, 1836, these companies had laid out £349,808 in conveying water from the river Clyde to every part of the city and suburbs. Revenue £25,302 13s. 9d. Number of water renters, 44,879. Quantity of water furnished daily in imperial gallons, 8,218,000; of which filtered, 7,518,000 gallons. Rates:—lowest charge per family, 5s. 6d. per annum, rising on a graduated scale to 13s. on houses rented at £10. Above £10 of yearly rent, 6½ per cent. on rental. Public works, varying from £6 to £12 10s. per annum, for a daily supply of 1000 imperial gallons.

It is to be regretted that, with the exception of Mr Kirkman Finlay of Castle Toward and myself, none of the original parliamentary committee survive to witness the unspeakable benefits which they and their successors have conferred on all classes of society.

COMMON SEWERS.

Fifty years ago there were no common sewers in this city. In 1790, the New Town Building Company made a sewer from George Square to St. Enoch's burn. It was during the last thirty years, however, that sewers became general. The common sewers which the magistrates, as trustees on statute labour, had laid in forty-five streets, extended in 1832 to *seven miles and fifty-six yards*. It is unnecessary to say that the public health has been much benefited by these sewers.

FOOT PAVEMENTS.

Sixty-three years ago there were no foot pavements in this city. In 1777, Mr. John Brown, master of works, laid a pavement on the east side of the Cancleriggs-Street, from the Trongate to Bell-Street. This was the first street pave-

ment in the city. In the following year, Mr. John Wilson, smith and iron-monger, laid a pavement in front of his shop in Hutcheson's hospital, then in the Trongate. On 16th August, 1780, it was reported to the Town Council that the proprietors of houses on the south side of the Trongate, from the Tron church to Stockwell-Street, had laid a foot pavement in front of their property similar to Mr. Wilson's. In 1836 it was computed that in the city and Blythwood's town there were upwards of one hundred and twenty miles of foot pavements; supposing these pavements to average nine feet broad, there would be 633,600 square yards in the above district, which, at six shillings per yard, would amount to £190,080. The expense of making and keeping these foot pavements in repair is defrayed by the house proprietors, while the expense of the causeyed road-way is defrayed by an assessment on the inhabitants.

GAS COMPANY.

In 1817 a Gas Company was incorporated in this city on a large scale. Including recent additions, the works occupy an area of 14,831 square yards of ground. In these works there used to be 152 retorts, each capable of making 5,000 cubic feet of gas in twenty-four hours. Of late additional gasometers have been erected in different parts of the city and suburbs. The pipes, which are all laid under the foot pavements, extend to upwards of 120 miles. In generating gas for the supply of the city and suburbs, upwards of 9,000 tons of canal coal are annually consumed. On 5th September, 1818, the street lamps were lighted with gas for the first time. In 1836 there were 2,050 street lamps with one jet, and 47 with three jets. The scale of charges for lighting per annum, commencing 1st June, 1836, is as follows: six nights in the week, from sunset to 8 o'clock, one jet, 5s. 10d.; to 9, 7s. 8d.; to 10, 9s. 6d.; to 11, 11s. 3d.; to 12, 13s. 1d. Swallow tail burners are charged as two jets each, No. 1 argands as three, No. 2 as five, No. 3 as seven, No. 4 as nine; one-sixth is added to the above when the lights are used on Sabbath evenings. Street lamps 17s. 6d. each. The charge for gas per metre is 9s. for 1,000 cubic feet, subject to a progressive discount, varying from 5 to 30 per cent., according to the quantity consumed. Since 1836 the company have made several alterations and additions on their works.

BRIDGES.

Bridges are a sort of edifices very difficult to execute on account of the inconvenience of laying foundations and walling under water. Among the Romans the building and repairing of bridges was first committed to the pontifices or priests, then to the censors or curators of the roads, lastly the emperors took the care of the bridges into their own hands. In the middle ages bridge building was reckoned among the acts of religion; and a regular order of hospitallers was founded by St. Benczete towards the end of the twelfth century, under the denomination of pontifices or bridge builders, whose office it was to be assistant to

travellers, by making bridges, settling ferries, and receiving strangers in hospitals, or houses built on the banks of rivers.

STOCKWELL-STREET BRIDGE.

This bridge was built over the Clyde, near the waterport, in the year 1345, by Bishop Rae, aided by Lady Lochow, who had property on both sides of the river. It was originally only twelve feet wide, and consisted of eight arches. On 7th July, 1671, the south arch fell on the day of Glasgow fair. In 1777 an addition of ten feet was made to its breadth, and two of the arches built up. In 1821 the celebrated engineer, "Telford," introduced ornamental iron foot paths. This bridge is now 415 feet long, and thirty-four feet wide within the railing.

JAMAICA-STREET BRIDGE.

The foundation stone of this bridge was laid with great masonic solemnity on 29th September, 1768, by Mr. George Murdoch, Lord Provost. This bridge had seven arches, was 500 feet long, and thirty feet wide within the parapets. The design was by Mr. William Mylne, architect in Edinburgh, and executed by Mr. John Adam, who subsequently built Adam's Court.

HUTCHESON'S BRIDGE.

The foundation stone of this bridge was laid in 1794, by Mr. Gilbert Hamilton, Lord Provost. It had five arches, was 406 feet long, and twenty-six feet wide within the parapets. I do not know who gave the design. It was executed by Mr. John Robertson. On 18th November, 1795, during a great flood in the river, it was swept away, after the parapets were nearly completed.

HUTCHESON'S BRIDGE REBUILT.

This bridge has been rebuilt on the site of the former one, from designs by Mr. Robert Stevenson, an eminent civil engineer, and executed by Mr. John Stedman. It has five arches, is 406 feet long, and thirty-six feet wide within the parapets. The foundation stone was laid on 18th August, 1829, with great masonic solemnity, by Mr. Robert Dalglish, preceptor of Hutcheson's hospital.

GLASGOW BRIDGE.*

The increase of trade and population of the city and adjacent districts having been such as to render the Jamaica-Street bridge unfit for its purposes, the

* Being desirous of ascertaining the width of the London bridges, I employed an eminent surveyor in London, who certified the following as correct.

LONDON BRIDGES.

Vauxhall, 980 feet long, 36 feet wide; viz., roadway, 23 feet, and 2 side-paths, each 6 feet 6 inches.

Westminster, 1068 feet long, 41 feet wide; viz., roadway, 23 feet, and 2 side-paths, each 6 feet 6 inches.

trustees resolved to remove it, and to erect one more suitable in its stead. This bridge was designed by Mr. Thomas Telford, and is admitted to be one of the greatest ornaments of the city. It is cased with Aberdeen granite, has seven arches, is 560 feet long over the newals, and 60 feet wide over the parapets. Mr. Charles Atherton, resident engineer; Messrs. John Gibb & Son, contractors. The trustees having associated me with Mr. Telford in the preliminary arrangements of this most important edifice, I was appointed arbiter between the trustees and the contractors; and on 8th July, 1833, honoured by laying the first stone of the foundation course of the south pier, at the depth of eighteen feet below high water mark—or ten feet deeper than the piers of the former Jamaica-Street bridge—amid the cheers of 200 operatives and a surrounding multitude. When the bridge was finished, the contractors presented me with the great “Lewis,” which suspended the heavy stones, to be kept as an heir-loom in my family.

On 3d September, 1833, the foundation stone, technically so called, was laid with great masonic solemnity, by Mr. James Ewing of Levenside, Lord Provost, one of the members of Parliament for the city, in presence of the Grand Lodge of Scotland, thirty-three other lodges, the civic authorities of this city, and the magistrates of twelve burghs, from the counties of Lanark, Renfrew, and Ayr, in full costume. The very Reverend Principal MacFarlan preached an appropriate sermon in the Cathedral, and the Rev. Dr. Macleod of Campsie—now of St. Columba, Glasgow—acted as grand chaplain. The civic and masonic authorities entrusted me with the entire arrangements. The procession consisted of about 4,000 persons, including upwards of 200 musicians; and it is within bounds to say that 150,000 persons witnessed the splendid spectacle. Three hundred gentlemen connected with the business of the day dined in the Assembly Rooms, the Lord Provost in the chair.

Before the Jamaica-Street bridge was removed, an elegant timber accommodation bridge for carriages was erected opposite to Portland-Street, from plans by Mr. Robert Stevenson, who gave the design for Hutcheson’s bridge. When the Glasgow bridge was finished, the neighbourhood petitioned that the timber bridge should be allowed to remain, which was accordingly granted.

Blackfriar’s, 1028 feet long, 42 feet wide; viz., roadway, 29 feet, and 2 side-paths, each 6 feet, 6 inches.

Southwark Iron Bridge, 903 feet, 6 inches long, 42 feet wide; viz., roadway, 28 feet, and 2 side-paths, each 7 feet.

Old London, 922 feet long, 45 feet wide; viz., roadway, 31 feet, and 2 side-paths, each 7 feet.

New London, 690 feet water way, and 53 feet wide within the parapets; viz., roadway, 35 feet, and 2 side-paths, each 9 feet.

GLASGOW BRIDGE.

Glasgow Bridge, 560 feet long over the newals, 60 feet wide over the parapets; viz., roadway, 34 feet wide, and 2 side-paths, each 12 feet wide. The 2 parapets are each one foot thick; so that the Glasgow Bridge is wider than any river bridge in the United Kingdom.

THE PUBLIC GREEN.

In 1814 the Town Council received various capability plans for improving the public green, after which they were pleased to accept mine, and from time to time to vote large sums for completing the improvements. When I commenced my labours the surface of the green was so very unequal and marshy as to be of comparatively little use to the community. The high green, which was very unequal in its surface, was separated from the Calton green by the stagnant Camlachie burn, and from Provosthaugh by a spongy ditch or gott. The Calton green and haugh were so marshy as even in summer to be nearly useless, and the banks of the river contiguous to peat bog were so rugged and cut up by springs, as to be completely useless. The west part of the green lay so low and so unequal in its surface, that a smart shower laid it under water. The public washing-house, which was placed at the east end of the low green, had become offensive from the stagnant burn which supplied it with water. The slaughter-house was placed at the bottom of the green, on the banks of the river, and the offals allowed to remain till putrefaction took place; adjoining to which there were tan pits, a glue work, and a manufactory of therm from the intestines of animals in a recent state, and to complete the nuisance, depots were made for the sale of coal and coal dross, and the space now occupied as East Clyde-Street was used by the police as a receptacle for the filth from the streets.

The only entries to the green were by the Saltmarket, then narrow and oblique, the Cow Lane, and the Stockwell-Street bridge; and these were so narrow, irregular, and dirty, from their vicinity to the slaughter-house, and bounded by an open burn used by curriers for cleaning skins, that with the exception of the Saltmarket entry, they were chiefly used by cattle, fleshers' servants, and dogs.

The following may be taken as an outline of the improvements which have been made since 1814:—A considerable part of the surface of the low green was raised about four feet. Some parts of the high green were excavated seven feet, and other parts filled up about nine feet. The Camlachie burn, from the head of the green to the river at the west side of the jail, is conveyed in a tunnel, and the stagnant water from the gott on the north side of Provosthaugh, is also conveyed to the river in a similar manner. The Calton and the high greens and Provosthaugh are drained and combined into one.

The springs in the banks of the river at Peatbog are collected into permanent wells; and a collection of mineral waters at the head of the green has been designated by my name. The washing-house has been removed to a convenient distance, and the slaughter-house insulated—the offals and blood removed every day, under the authority of a specific Act. Monteith Row, Green-Street, and the street in front of the public offices, are separated from the green by a parapet wall and iron railing. The south end of Saltmarket-Street is widened, Green-Street and East Clyde-Street opened, and a spacious ride and carriage drive, of about two and a half miles long, formed around the green. This ride and carriage drive was made at the expense of the corporation, aided by fifty-four gentlemen, who gave £20 each for the privilege of using the drive with a four-wheeled

carriage, and £10 each for the privilege of using a two-wheeled one. Provost-haugh has been planted, and grass made to grow where grass never grew before. This public park, bounded on the south by the beautiful windings of the river, on the west by the Grecian Doric portico of the public offices, exhibiting the proportions of the Parthenon, may, for picturesque effect and general usefulness, compare with any similar one in the empire.

CATTLE MARKET AND CATTLE SHOWS.

LIVE CATTLE MARKET.

Previously to 1818 the principal fleshers in this city were frequently obliged to travel a circuit of seventy or eighty miles to purchase cattle in lots, and to rent expensive parks in the neighbourhood of this city to graze them in. The mode of supply is now completely changed. In 1818 a spacious market-place for the sale of cattle was fitted up adjoining Graham Square, between the south-east and north-east approach to the city, in which there are a commodious inn, stables, sheds, a byre to hold 120 bullocks in view, and 260 pens to contain 9,360 sheep. This market-place, allowed to be the most complete in the kingdom, occupies an area of 29,561 square yards, or rather more than six imperial acres, is paved with whin, and inclosed from the streets by ashlar stone walls. Since its formation, graziers and dealers, for more than fifty miles round Glasgow, find it their interest to send cattle to it, where they find a ready sale, and a return in cash. It is admitted that this market has been of great use to all classes of the community, excepting, perhaps, the more wealthy fleshers. The dealers are benefited by a regular sale, without running the risk of bad debts; the public have a more steady and plentiful supply of butcher meat of the best quality; the flesher is saved the trouble and the public the expense of travelling. The flesher of small capital, who formerly had not the means of getting good meat, can now go to market, and if his capital be equal to purchase a bullock, and a dozen of sheep or lambs, he can compete with his more wealthy brethren. Monopoly is now unknown. This market has also been beneficial to the corporation of the city, whose members are the trustees. The dues, which are moderate, were let by auction at Whitsunday, 1836, for a period of years, at the annual rent of £1285, a sum which, after paying the interest of the debt, ground-rent, repairs, and every other expense, leaves a clear profit to the trust fund of upwards of five hundred pounds per annum. It is matter of gratification to me to have projected this market, and to have brought it to its present prosperous state. Prior to its establishment, cattle of every description were sold on the streets in various parts of the city, and to a very limited extent. Since that period the sales have increased rapidly. During the year ending 1st May, 1828, viz., ten years after the market was opened, the sales, exclusive of horses, calves, and pigs, amounted to 162,740 animals; viz., bullocks and milch cows, 17,840; sheep and lambs, 144,900.*

* Comparative statement between the cattle sold in Smithfield market, London, and those slaughtered in Glasgow, taken in connection with the population. It appears from a return

For a number of years by-past a considerable trade has been carried on here of curing rounds for beef hams. In 1821 the fleshers in Edinburgh began to send rounds to Glasgow; and to such an extent has this trade come, that in the year ending 31st December, 1839, 14,491 rounds were sent to Glasgow for curing—average value of each round, one sovereign. The curers have travellers who go south through Ayrshire, and as far north as Aberdeen, supplying Edinburgh in passing. The above rounds are exclusively from Edinburgh; some of the dealers make extensive purchases from the Glasgow fleshers.

It would be invidious to state the quantity which each curer brings to the market. The principal curers are in the following order: Messrs. William Allan & Sons, H. & W. Fulton, Buchanan & Cairns, and James Dunlop.

CATTLE SHOWS.

The cattle shows, under the patronage of the Highland and Agricultural Society of Scotland, have done much to improve the breed of stock, and to excite emulation among agriculturists. There have been three cattle shows in this city under the patronage of the Society. As a corroborative proof of the gradually increasing popularity of this great national Society, we may mention, that the first show in this city was in 1826: on that occasion 5,522 persons paid one shilling each for admission into the show-yard. On the day of the show 280 noblemen, gentlemen, and others, dined in the Town Hall; the Marquis of Tweeddale in the chair. The second show was in 1828, when 8,000 persons were admitted to the show-yard; 400 noblemen, gentlemen, and others, dined in the Assembly Rooms—the Duke of Hamilton and Brandon in the chair. The third show took place on 27th September, 1838: 16,651 persons were admitted to the show-yard in the live cattle market place at one shilling each; 1,635 noblemen, gentlemen, and others, dined in a pavilion in Hope-Street. Elegant platforms were fitted up, with appropriate devices, for the accomodation of the chairman and croupier, and their respective supporters,—George Granville Sutherland Leveson Gower, Marquis of Stafford and Duke of Sutherland, in the chair. George Hay, Marquis of Tweeddale, croupier. The chairman was supported on his right by the Lord Provost of Glasgow, His Excellency A. Stevenson, the

to an order of the House of Commons, dated 21st May, 1822, and subscribed at Guildhall by Mr. B. W. Scott, that the sale of cattle in Smithfield market was as follows:—

SMITHFIELD, LONDON.				GLASGOW.			
	<i>Neat Cattle.</i>	<i>Sheep.</i>	<i>Total.</i>		<i>Neat Cattle.</i>	<i>Sheep.</i>	<i>Total.</i>
1793,.....	116,848....	728,480.....	845,328	1793.....	16,225.....	71,508.....	87,733
	Population uncertain.			At this period the cattle were very small and ill fed. Cows, 6,628; Calves, 9,597.			
1801,.....	134,546....	760,560.....	895,106	Population, 67,000 souls.			
	Population about 900,000 souls.			1815,.....	17,987.....	77,819.....	95,806
1811,.....	125,012....	966,400.....	1,091,412	Cattle large, and well fed.			
	Population, 1,050,000 souls.			Population, 126,000 souls.			
1821,.....	142,133....	1,187,230.....	1,249,363	1822,.....	21,950.....	111,758.....	133,708
	Population, 1,274,800 souls.			Cattle large, and well fed.			
				Population, 150,000 souls.			

In both statements calves are included with neat, and lambs with sheep.

ambassador of the United States of America; his Grace the Duke of Montrose, the Earl of Leven and Melville, Principal Macfarlan, the Hon. Captain Gordon, Sir Archibald Campbell of Garscube, Sir Percie Nugent, Mungo Nutter Campbell, Esq., of Ballimore, the Master of Rollo, &c. &c. And on his left by Lord Belhaven and Stenton, Lord Clement, Lord Waterpark, A. Lockhart, Esq. M.P., John C. Colquhoun, Esq., M.P., — Bramston, Esq., M.P., Hon. Admiral Fleming, Hon. Mr. Howard, Mr. Baggott, &c. &c. The croupier was supported on his right by Johnston Hope, Esq., M.P., A. Speirs, Esq., M.P., Sir W. Napier, Sir George Warrender, Sir J. Riddell, Sir Charles Ferguson, Sir J. P. Orde, Sir John Hall, Sir George Suttie, Sir Gilbert Stirling. And on his left by Sir James Campbell, Sir John Naismith, Sir Charles Monteith, Sir John Dunlop, M.P., Sir John Hope, Sir J. P. Forbes, Sir Norman M'Donald Lockhart, Sir John Cunningham, Sir John Ogilvie, Sir Robert Houstoun. In front of the platform there were elevated tables, where Sir Neil Menzies the Treasurer, Sir Charles Gordon the Secretary, and other office-bearers and distinguished members of the Society were accommodated.*

Another company, consisting of 115 persons dined in the Trades' Hall, the Earl of Roseberry in the chair, the Earl of Dalhousie, croupier—so that 1,750 persons dined in honour of this occasion. After dinner the company in the Trades' Hall joined those in the pavilion. The stock exhibited amounted to upwards of 800. This show, whether we consider the quality and number of the stock,—the splendour of the pavilion, exhibiting pictorial emblematical representations of agriculture, farm yards, and stock,—the number and high respectability of the noblemen, gentlemen, and practical farmers who honoured it with their presence, was by far the most splendid that ever was held in the empire. The corporation of Glasgow gave the free use of the cattle market to the Society, and contributed largely to the premiums, and upwards of one hundred of the citizens became members, which added materially to the funds of the Society. Mr. Mungo Campbell, Jun., and I, were honoured with the appointment of local secretaries; and as a mark of their approbation, the Society presented each of us with a complimentary letter, accompanied with a very elegant gold medal.

NECROPOLIS.

This cemetery, the property of the Merchants' House, in the immediate vicinity of the Cathedral, is unequalled in the country for picturesque effect, and is in many respects similar to the Pere La Chaise in Paris. It was opened for sepulture in May, 1833, and already contains a great number of splendid monuments erected to the memory of departed worth.

Anxious as we are to convey the full meed of praise so justly due to the managers of the Merchant's House, it would be an act of injustice not to allude to the invaluable services of Mr. Laurence Hill, LL.B., of Barlanerk. To that gentleman, who held the important and onerous office of collector to the Merchants' House for a very long period, the friends of the Necropolis are under the

* The above arrangements were somewhat altered in consequence of some of the gentlemen choosing to occupy other seats in the pavilion.

deepest obligation. Endowed with a noble taste, his zeal for its success knew no bounds. He was the first to erect a splendid family mausoleum as an example to others. He edited and printed a *Companion to the Necropolis*, with suitable engravings, and drew up annual mortality bills for the cemetery, the value of which is much greater than appears at sight.

Mr. Hill, in disposing of Burying-ground to the Jews, reserved to himself the entire direction of the architectural ornaments. The facade was designed by Mr. John Bryce. On the left is an ornamented column in imitation of Absalom's pillar in the King's dale. On the front of this column, and immediately under its capital, as forming a piece of fret-work, are the Hebrew letters representing the words,—“Who among the gods is like unto Jehovah!” On the shaft of the column are some beautiful stanzas from Byron's *Hebrew Melodies*, terminating in the following:—

“Tribes of the wandering foot and weary breast,
Where shall ye flee away and be at rest?—
The wild dove hath her nest, the fox his cave,
Mankind his country,—Israel but the grave.”

On the opposite side of the column there is inscribed,—“And there is hope in thine end, saith the Lord, that thy children shall come again to their own border. How hath the Lord covered the daughter of Zion with a cloud in his anger, and cast down from heaven to the earth the beauty of Israel, and removed not his footstool in the day of his anger. But though he caused grief yet will he have compassion according to the multitude of his mercies. For he doth not afflict willingly, nor grieve the children of men.”

Mr. Mylne, the able superintendent, has displayed great taste in laying out the burying-places and decorating the ground.

NUMBER AND VALUE OF SHOPS IN THE CITY.

In 1712, the Convention of royal burghs directed the magistrates of Glasgow to let them know the rental within the burgh, for the purpose of laying on the land tax, and also to state the number and value of the shops. On that occasion provost Rodger and the other magistrates certified that they had divided the town into districts, when they found that there were 202 shops in it, viz:—In the High-Street, above the college, 4; between the college and the cross, east side, 19, west side, 20; in Bell-Street, 4; north side of the Gallowgate, 28, south side, 15; east side of the Saltmarket-Street, 30, west side, 24; south side of Trongate, 6, north side, 24; and in the Bridgegate and Stockwell-Streets, 28. At that period the shops were all near the cross. There were 54 in the Saltmarket-Street, which seems to have been the favourite street, and only 30 in the Trongate. The highest rent of a shop was £5, and the lowest 12s.—the average a little more than £3. In taking the census in 1819, I became desirous of ascertaining the number of shops in seven streets, so as to compare them with those in 1712, when I found that they amounted to 1064, viz: in High-Street, from the cross to the Bell of the Brae at Drygate, 211. In Bell-Street, 60. In the Gallow-

gate, from the cross to the toll bar, 259. In the Saltmarket-Street, 121. In Trongate and its continuation from Mitchell-Street, 230. In Bridgegate-Street, 104; and in Stockwell-Street, 79. At the census of 1831 there were 3184 shops in the city and suburbs. On that occasion I formed a table exhibiting the particular trades carried on in these shops. Many of them, in the elegance of their fittings, particularly in Buchanan-Street, are not surpassed by any shop in Bond-Street, London—some of them are let as high as £250 per annum. Since 1831 the number of shops in this city has been greatly increased.

FORMATION OF THE SUBURBS.

The Gorbals, it is very probable, was in existence before the bridge was built in the year 1345. The superiority or right of Barony and Regality was, in 1607, disposed by John Spottiswood, archbishop of Glasgow, to Sir George Elphinstone. A charter of conformation was granted by James VI. in 1611; and in 1647 the disponent of Sir George Elphinstone conveyed the superiority to the Magistrates and Town Council of Glasgow, who since then have enjoyed and exercised the whole rights, privileges, jurisdictions, and powers of Baron, superior, and bailie. When I was chief magistrate in 1803, the practice was for the person who held this office to pay the whole expense of the municipal entertainments less £10 paid by the magistrates. If this was a showy, it was also a very expensive office. These entertainments have now been happily done away with. In 1705, Mr. John Walkinshaw began to feu part of the Gallow Muir, which he called Borrowfield, since known by the name of Bridgeton. The progress of the village was very slow, for in the year 1724 he had feued only nineteen small lots; and there were very few houses in Bridgeton till the year 1776, when Rutherglen bridge was built. Calton, which was laid out about the same time as Bridgeton, advanced more rapidly. The villages of Old and New Calton were formerly parts of the Barony of Borrowfield, but were erected into a Burgh of Barony by a Crown Charter dated 18th, and written to the seal, registered, and sealed, 13th August, 1817. Anderston was laid out in 1725, and erected into a Burgh of Barony, by a Crown Charter, dated 24th June, and sealed 25th November, 1824. The proprietor of Stobcross laid out a village in 1770; and in honour of his chaplain, whose name was Finnie, called it Finnieston. Messrs. Dugald Bannatyne, John Thomson, and Robert Smith, commenced building in 1786 what was then called the New Town of Glasgow, in the district of George Square. Mr. Thomas Craigie built the first house in Tradeston, in Centre-Street, in 1791. Mr. Peter Jack the first house in Port-Dundas, in Milton-Street, in 1792; and the Rev. John M'Leod the first house in Hutchesontown, in St. Ninian-Street, in 1794.

As has been elsewhere stated, prior to 1800, Mr. Campbell of Blythswood's property, from West Nile-Street to the Burgh of Anderston, extending to 470 acres, 1 rood, and 2 falls, was, with trifling exceptions, let for agricultural purposes. During that year Messrs. Dugald Bannatyne, William Jack, and I, purchased a portion of these lands, and opened up Bath-Street, which was the commencement of the splendid town of Blythswood.

DIVISION OF PARISHES IN GLASGOW.

The district now comprehending the ten parishes of the Royalty of Glasgow and the Barony, formed but one parish till 1602. In 1595, a minister was appointed for the landward or Barony part of the parish; but it appears that the district connected with the Barony church was not then formed into a separate parish. On 21st July, 1599, the Presbytery applied to the Magistrates and Council to divide the town into two parishes. After due consideration, the following answer was returned:—"They thocht gud that the township should be divided in twa parishes, provyding that the town be not burdenit with seatin or biggin of kirks, nor furnishin nae mae ministers nor they hae already." This act of the Town Council was appoven of by the incorporated Trades. On 23d of June, 1602, the Presbytery again applied to the Magistrates and Council for a division of the parish, and at this time the township was divided into two parishes.

On 5th April, 1609, the Presbytery made a representation to the magistrates, wherein "they lamented that the burden of the ministers of Glasgow was insupportable, and recommended that an third minister be gotten and provyded for their relief in the word and discipline." It does not appear that the city was divided into three parishes till 1622, when Mr. Robert Wilkie was appointed minister of the Blackfriar's church.

In 1633, Archbishop Lindsay expressed his regret that there were but three ministers in the town. It was not, however, till 1648, when Mr. Patrick Gillespie was appointed to be minister of the Outer High church, that the city was divided into four parishes.

For some time after the Wynd church was built it was occupied as a privileged presbyterian meeting house during the time that episcopacy was exercised in Scotland; but at the revolution in 1688, it was erected into a parish church, and then the city was divided into five parishes.

In 1720, when the Ramshorn church (St. David's) was built, the city was divided into six parishes.

In 1765, two years after the first minister was appointed to St. Andrew's church, the city was divided into seven parishes.

In 1782, when St. Enoch's church was built, the city was divided into eight parishes.

At this period the parishes were so ill defined that it was difficult to ascertain the boundaries, it being no uncommon thing for one close, and even one common stair to be situated in two parishes, and one parish to have two or more churches within its bounds. In dividing the city first into nine parishes in 1819, when St. John's church was built, and then into ten in 1820, when St. James's church was added to the number, I bounded each parish by streets. Every church is now in its own parish, except the Outer High, which is necessarily in the Inner High church—the Inner and Outer High churches, being both under the roof of the Cathedral.

SECTION VII.

CONCERNING EDUCATION.

From an early period of its history, Scotland has been conspicuous for the information of the people. As a detail of the numerous seminaries in this city will be given in subsequent papers, the following brief notice seems all that is here necessary.

The University:—At the request of bishop Turnbull, James II. obtained a bull from pope Nicholas V., constituting a university in Glasgow, with similar privileges and immunities as the university of Bononia. The bull is dated from Rome, 17th January, 1450.

The Grammar School of this city is of great antiquity. It depended on the cathedral church. In 1494, Martin Wann, chancellor of the metropolitan church, brought an action against Mr. D. D. Dwne, a priest, for teaching without his leave. Archbishop Blackadder, with the advice of the chapter, declared in favour of the chancellor. In 1825 I published an historical account of the Grammar school, now termed the High School, which contained a list of the duxes.

The Andersonian University was founded by the late Mr. John Anderson, professor of natural philosophy in the University of Glasgow, on 7th May, 1795. The business of the university commenced on 21st September, 1796, by Dr. Garnet reading popular and scientific lectures in natural philosophy and chemistry, to persons of both sexes, illustrated by experiments.

Mechanics' Institution:—Dr. George Birkbeck, an eminent and philanthropic physician in London, on the retirement of Dr. Garnet, was appointed professor of natural philosophy in Anderson's University. In addition to what had been formerly taught, Dr. Birkbeck introduced a familiar system of instruction, which he demonstrated by experiments to five hundred operatives, free of expense, on condition that the operatives would come with clean face and hands, listen attentively, and be recommended by some responsible person. On that occasion I certified upwards of one hundred and fifty operatives.

In 1823 the mechanics of Glasgow were incorporated under a seal of cause from the magistrates, with the view of disseminating literary and scientific knowledge among their fellow operatives, particularly those branches most immediately connected with their daily occupation. When Dr. Birkbeck retired to London he was succeeded by Dr. Ure. The society then exacted a small fee from the operatives. A paper illustrative of this most important society will be read at the Association.

Having a desire to ascertain the number of schools and scholars in this city, I made the necessary investigation in 1816, and published the names of the teachers, what they taught, and the number of scholars, in "*The Annals of Glasgow*," where it is shown that, exclusive of the university and thirteen institutions where youth were educated, there were 144 schools; that, including the public institutions, there were 16,799 scholars, of whom 6,516 were taught gratis, in charity or free schools. As several of the scholars attended more schools than one, the number of individuals was not ascertained. Sabbath-schools were established here in 1786, under the auspices of Mr. John Muir, uncle to the Rev Dr. Muir, minister of St. Stephen's church, Edinburgh. In 1820 I published an account of them in the "*Rise and Progress of the Public Institutions of Glasgow*," where it was shown that there were 106 schools, 158 teachers, 4,668 scholars; viz., boys, 2,235, girls, 2,433, besides 3 adult schools, where there were 3 teachers, and 25 male, and 54 female scholars.

The Glasgow educational society was instituted in 1835, under the auspices of Mr. David Stow. The foundation stone of the Normal seminary in Dundas Vale, was laid on the 14th November, 1836, by Mr. John C. Colquhoun, M.P., of Killermont and Garscadden, president of the society. A particular account of this most valuable and prosperous institution is to be read at the Association.

RELIGIOUS AND CHARITABLE INSTITUTIONS.

Fifty years ago there were no religious institutions in this city, and with the exception of two hospitals, the trades' incorporations, and a few friendly societies, there were no institutions for the relief of persons in distress. On 8th December, 1794, the Royal Infirmary was opened for patients. In 1796, the Glasgow Missionary Society was instituted; and in 1835 I ascertained that thirty-three societies had been formed, the voluntary subscriptions to which amounted to £30,039 7s. 8d., which, when added to £15,191 3s. 8d., the expenditure of forty-five benevolent societies, makes the gross expenditure of the religious and benevolent societies of Glasgow amount to £45,230 11s. 4d. In addition to this sum the following funds have been placed under the management of the magistrates and ministers, for educational purposes. In 1825, by Mr. M'Lauchlan of Calcutta, £8,231 18s. In 1831, by Mr. James Murdoch, Glasgow, £4,417 18s. 6d. In 1833, by Rev. Dr. Bell of London, (formerly of Madras) £9,791 13s. 4. Contingent on the life of Mrs. Maxwell, late of Glasgow, aged upwards of seventy-five years, £2,000—total, £24,491 9s. 10d. Total for religious, benevolent, and educational purposes, £69,722 1s. 2d. It is believed, that since 1835 the income and expenditure has been considerably increased. Parliament, in revising the poor laws, requested the assistance of the General Assembly of the church of Scotland, *inter alia*, respecting the amount of free will offerings at the church doors. In compliance therewith the very Rev. Gavin Gibb, DD., moderator of the General Assembly of the church of Scotland, and I, reported that we had made the requisite investigation, and found that the yearly average sum collected at the church doors of the city churches for ten years preceding 1816, was £1843 6s. 9 $\frac{3}{4}$ d.

LITERATURE.

From the commercial enterprize which engages the time and attention of its inhabitants, this city cannot boast of a literary character. There are many individuals, however, of cultivated minds and extensive attainments, some of whom have formed themselves into societies for the promotion of literature and science. About the middle of last century a literary society was established here. It consisted chiefly of the professors of the university, and clergymen of the city and neighbourhood, and enumerated among its members, Dr. Trail, Mr. John Miller, professor of law, and a number of persons distinguished for their literary and scientific attainments. During their meetings Dr. Hutchison explained and illustrated the works of Arrian, Antoninus, and the other Greek philosophers. Adam Smith read those essays on taste, composition, and the history of philosophy, which he had previously delivered while a lecturer on rhetoric in Edinburgh. Professor Arthur descanted on the principles of criticism, and the pleasures of imagination. Dr. Black communicated his discoveries on latent heat; and Dr. Moor illustrated Grecian literature, and the influence of the fine arts upon society. A literary and commercial society was instituted here about the beginning of the present century; at their periodical meetings essays on various important subjects are read.

In 1802, a philosophical society was instituted here, having for its object the general diffusion of knowledge, by the frequent discussions of philosophical subjects, as well as the exhibition of models for the improvement of machinery. There are also dilettanti and many other societies for the diffusion of knowledge.

A Maitland club has been established in this city similar to the Bannatyne club of Edinburgh, and the Roxburgh club of London; viz., for reprinting, for *private use*, valuable and scarce books, or the printing for the first time, in the same manner, curious and rare manuscripts illustrative of the history of the literature or the antiquities of Scotland.

LIBRARIES, AND BOOK SOCIETIES.

The first circulating library in the west of Scotland was established in Glasgow in 1753, by Mr. John Smith, sen., (grandfather to Mr Smith of Cruthersland,) who lent out books at the rate of one-half-penny per volume. There are now many circulating, as well as public and private libraries in Glasgow. Of the public libraries the more valuable are Stirling's, which was instituted in 1791, the Glasgow, in 1804, and the Robertsonian in 1814. Of late years a number of book societies have been established in this city; they are conducted on a plan similar to that of circulating libraries, with this difference, that the books belong to the readers themselves, a great proportion of whom are of the working classes.

NEWSPAPERS.

The first newspaper printed in the west of Scotland was the *Glasgow Courant*, which appeared in 1715.* It was published three times a week, consisted of twelve pages, in small quarto, and was sold for three half-pence, or "one penny to regular customers." In the prospectus it was said to be "for the use of the country round; any gentleman, or *minister*, or any other who wants them may have them at the University Printing House, or at the Post Office." From 1715 to the present time there have been attempts to establish nineteen newspapers in this city, the particulars of which I published in 1820, in the "*Rise and Progress of the Public Institutions of Glasgow*." In 1840 there are ten papers; viz., *Courier and Chronicle*, three times a week—*Herald*, *Argus*, *Constitutional*, *Scotish Guardian*, and *Scots Times*, two times—and *Journal*, *Scotch Reformers' Gazette*, and *Evening Post*, once a week.

PUBLIC COFFEE-ROOMS, CLUBS, &c.

Sometime prior to 1770, a coffee-room was opened here, where the subscribers met to read newspapers and other periodicals; but this was confined to a privileged class. It was not till 1781, when the Tontine coffee-room, at the Cross, was opened, that the accommodation became general to the public; and since that period the taste for political information has greatly increased, as evinced by the following table.

Public Coffee-Rooms and Clubs.	Opened.	Number of Subscribers on 31st Dec. 1839.	Entry Money.	Annual Subscription.	Amount of Subscriptions.
1. Tontine Coffee-Room at the Cross, . . .	1781	798		1 5 0	997 10 0
2. Royal Exchange Coffee-Room, . . .	1829	1455		2 2 0	3055 10 0
3. Western Club, . . .	1825	414	31 10 0	5 5 0	2173 10 0
4. Union Club, . . .	1838	263	20 0 0	5 0 0	1315 0 0
		2930			7541 10 0

Exclusive of public houses where newspapers are taken in for the use of their customers, there are a number of minor reading-rooms in the city, where the sub-

* The following are specimens of two early advertisements. *Glasgow Journal*, 24th March, 1746,—“On Monday last, James Dennistoun, Jun., of Colgreine, Esq., was married to Miss Jenny Baird, a beautiful young lady.” From the *Liverpool General Advertiser* 22d August, 1767,—“For sale, by the candle, the hull of the Snow Molly. N.B.—Three young men-slaves to be sold at the same time.” The sale took place on the Exchange.

scriptions vary from five to ten shillings. It may be near the truth to say, that although there are a few half-yearly subscriptions to the Tontine and Exchange coffee-rooms, and a few who subscribe to both, there are not less than 4,000 persons in Glasgow who read the newspapers in public places, at an expense of probably not less than £8,000.

GLASGOW DIRECTORY.

Mr. John Tait, who was connected with the Glasgow Journal newspaper, published a Directory on 15th May, 1783, and from his advertisement it appears that it was the first ever published in Glasgow. It seems that the speculation did not answer, for on 15th May, 1789, Mr. Nathaniel Jones published a Directory which contained 1539 names. As Mr. Jones held an office connected with the Tontine coffee-room, and was otherwise well acquainted with persons in trade, it is presumed that his list would be as complete as possible. In 1840, the Post Office Directory contains 9897 names. The following letters of the alphabet show the number of names beginning with each letter.

A, . . . 401	G, . . . 590	N, . . . 140	T, . . . 343
B, . . . 916	H, . . . 526	O, . . . 66	U, . . . 22
C, . . . 787	I, . . . 202	P, . . . 315	V, . . . 9
D, . . . 450	K, . . . 213	Q, . . . 2	W, . . . 668
E, . . . 105	L, . . . 381	R, . . . 517	Y, . . . 94
F, . . . 385	M & M ^c 1881	S, . . . 881	Z, . . . 3

CONCERNING SAVINGS BANKS.

There are two savings banks in this city, viz., the Glasgow Provident, and the National Security savings bank. As a particular account of these banks will be laid before the Association, all that seems necessary here is a short abstract.

THE GLASGOW PROVIDENT BANK.

In 1815, upwards of 200 benevolent persons in this city, observing that when the working classes were thrown out of work, or afflicted with disease, they had no savings to assist them, subscribed money and established a bank on the plan originated by the Rev. Henry Duncan, DD., minister of Ruthwell, late moderator of the General Assembly of the church of Scotland. The following is a list of

the first managers of the bank:—Kirkman Finlay of Castle Toward, Henry Monteith of Carstairs, James Dennistoun of Golfhill, James Ewing of Levenside, James Buchanan of Dowanhill, Archibald Smith of Jordanhill, Robert Findlay of Easterhill, Robert Dalglish, Dugald Bannatyne, Daniel Mackenzie, Walter Ferguson, and Archibald Lawson, Esqs. These gentlemen enjoy the high gratification of having conferred a great and lasting benefit on a valuable class of society.

THE NATIONAL SECURITY SAVINGS BANK.

This bank was instituted here in 1836, under the auspices of the late Mr. Alexander Gray, and is conducted in an admirable manner by a committee of practical merchants and manufacturers, of which John Leadbetter, Esq. is chairman.

“ The balance of £90,266 16s. 4d., due to depositors at 20th November, 1838, had amounted at 20th November, 1839, to £123,200 13s. 3d.; being an increase within the currency of the bank’s year of £32,933 16s. 11d., along with an accession of 4,738 new depositors. That such results during a period of dull trade, and serious commercial depression, afford great satisfaction to the friends of the bank, and are eminently creditable to the prudent foresight of the working classes.

“ It appears that at 20th November last, out of 6,000 accounts opened between the 1st August, 1836, and 29th November, 1837, a period embracing the first sixteen months of the institution, 3,142 of those accounts still contain balances amounting in all to no less a sum than £54,004 5s. 11d. That evidence so entirely conclusive of steady perseverance in provident habits, is most gratifying.

“ This meeting regard with much pleasure the very great number of small deposit transactions, not merely as affording illustration that the bank is fulfilling its primary objects in a remarkable degree, but as indicating also the exercise of good sense and right feeling on the part of parents and employers—by whose judicious advice many of the younger depositors doubtless have been prompted to commence, and encouraged to persevere. To an influence reflecting like honour on respectable masters and mistresses, this meeting is disposed to attribute in some measure the accession during the past year of no fewer than 1,132 domestic servants—a class for whose benefit this bank is peculiarly adapted.”

“ This bank, during little more than three years, has already paid or credited to depositors, of interest accruing to them, no less a sum than £7,061 7s. 4d.; and that such increase, with the safe custody of their money, must have greatly promoted the welfare of many deserving individuals and families.”

The following are copies of three of the numerous tables prepared by the managers:—

TABLE NO. I.

Balance due on 20th November, 1839,		£123,200 13 3
Depositors.	Description.	
7375	whose respective balances on 20th November, 1839, (including interest) did not exceed £20 each,	£40,169 6 11
1676	Do. where above £20 and not exceeding £50, ...	48,579 1 0
316	Do. where above £50 and not exceeding £100, ...	20,594 14 2
27	Do. where above £100 and not exceeding £150, ...	3,203 0 3
9394	Total number of Depositors, .	£112,546 2 4
106	Charitable Societies and Provident Associations, ...	3,986 19 10
43	Friendly Societies, ...	6,667 11 1
9543	Total number of Accounts. Total Balance, ...	£123,200 13 3

TABLE NO. II.

Description of Deposits.	From July 30th, to Nov. 20th, 1836.	Year ending November 20th, 1837.	Year ending November 20th, 1838.	Year ending November 20th, 1839.	Total.
Of one shilling, and not exceeding five shillings, ...	1145	3620	3669	5877	14311
Above five shillings, and not exceeding ten shillings, ...	476	1905	3119	3794	9294
Above ten shillings, and not exceeding one pound, ...	593	2756	4509	5616	13474
Above one pound, and not exceeding five pounds, ...	1019	3824	6342	8188	19373
Above five pounds, and not exceeding ten pounds, ...	384	1087	1769	2175	5415
Above ten pounds, and not exceeding twenty pounds, ...	249	683	928	1038	2898
Above twenty pounds, and not exceeding thirty pounds, ...	184	372	542	530	1628
Total individual transactions, ...	4050	14247	20878	27218	66393
Friendly, Charitable, and Provident Societies, ...	83	239	577	654	1553
Branch Banks, ...	—	—	36	107	143
Total, ...	4133	14486	21491	27979	68089

TABLE NO. III.

Comparative Classification of Depositors.

Description of Depositors.	New Entrants in Year ending 20th November.				Total.		Total.
	1836.	1837.	1838.	1839.	Male.	Female.	
Agricult. Employments,	0	0	284	196	424	56	480
Domestic Servants, . .	167	654	647	1132	174	2426	2600
Mechanics, Artificers, & their Wives, ...	370	1036	2202	1557	4284	881	5165
Clerks, Shopkeepers, & Dressmakers, ...	0	0	613	961	1271	303	1574
Factory Operatives, . .	489	491	315	111	1043	363	1406
Minors under 15 years of age, ...	165	387	466	331	787	562	1349
Labourers, ...	0	0	96	370	466	0	466
Other descriptions not specified.	783	1170	0	0	1009	944	1953
Total individuals, . .	1974	3738	4628	4658	9458	5535	14993
Friendly Societies, . .	13	6	50	49	0	0	118
Charitable and Provident Associations, ...	42	42	32	28	0	0	144
Branch Banks, ...	0	0	1	3	0	0	4
Total Accounts opened,	2029	3786	4706	4738	9458	5535	15259

It appears from the deposit transactions for 1839, that those of five shillings and downwards constitute twenty-one per cent.; of ten shillings and downwards, thirty-four per cent.; of one pound and downwards, fifty-four per cent.; of five pounds and downwards, about eighty-four per cent. In some of the neighbouring villages there are small banks who send their deposits to the Glasgow National. The interest allowed by the Glasgow is $3\frac{1}{2}$ per cent., and by the National 8d. the pound.

The information respecting the National Bank is taken from the fourth annual report of the managers, 31st January, 1840.

It is to be regretted that so few of the factory operatives, who have large wages, lodge their savings in the bank, which would be of more benefit to themselves and their families than contributing to trades' or political unions at the instigation of worthless designing demagogues.*

* The following is taken from an admonition to trades' unions by an eminent advocate, (now one of the Senators of the College of Justice,) who was very instrumental in getting the combination laws repealed. "The main scope and intent of trades' unions may be that of combinations to keep up wages; but it would hardly be exaggeration to term them combinations to keep down superior skill, conduct, and industry. That no man shall aspire above the common level,—that no man shall aim at superiority over his fellows in wages and station,—that no man shall presume to guide his own conduct by wiser rules than those which are established for the mass of his comrades, or to work where he pleases, or how he pleases,

SUMMARY OF THE TWO BANKS.

	No. of Depositors.	Due to Depositors.	Interest for 3 Years.
Glasgow, ...	3,227	£54,100 3 10	£4,698 16 10
National, ...	9,394	123,200 13 3	7,061 7 4
	12,621	£177,300 17 1	£11,760 4 2

OLD AND NEW STYLES, AND SCOTS MONEY.

As there are references in this publication to the Old and New Styles, and to Scots Money, the following is explanatory.

OLD AND NEW STYLE.

It was found that the spring equinox, which, at the time of the General Council of Nice, in the year 325, fell on or about 21st March, happened in the year 1751 about the 9th or 10th, and that the error was still increasing, and would, if not remedied, cause the equinoxes and solstices to fall at very different times in the year from what they had done in time past. An Act of Parliament was therefore passed in 1751, (24, Geo. II., cap. 23,) whereby eleven days were struck out of the following year to rectify the error.

VALUE OF SCOTS MONEY.*

Scots money is a twelfth part of the same denomination of Sterling money.

Scots.	Sterling.
A Doyt, or Penny is.....	£0 0 0 $\frac{1}{12}$
A Bodle, or Twopence is.....	0 0 0 $\frac{2}{12}$
A Plack, Groat, or Fourpence is.....	0 0 0 $\frac{4}{12}$
A Shilling is	0 0 1
A Merk, or 13s. 4d., or two-thirds of a pound is...	0 1 1 $\frac{4}{12}$
A Pound is.....	0 1 8

—those are the maxims of tyranny, established by fraud, to keep in its hands the guidance of folly. We can find no terms too severe to denounce the utter *contempt* we have for such conduct.”

* Jamieson's Etymological Dictionary.

SECTION VIII.

JAIL, COURT HOUSES, &c.

The old Jail at the Cross, built in 1603, was defective in almost every particular, and the accommodation for the administration of justice was very inefficient. The hall where the circuit court met was a part of the jail fronting the Trongate till 1794, when it was removed to a more convenient hall fronting the High-Street. There were no court-yards, chapel, nor infirmary to the jail, and only thirty-two apartments for prisoners of every description. Impressed with the necessity of affording more suitable accommodation for the courts of justice, and more convenient and healthful apartments for prisoners, the Town Council, on 13th February, 1807, resolved to erect a new jail, and public offices, at the bottom of the public green. The magistrates employed William Stark, Esq., an eminent architect, and expended £35,000 on the building, the foundation stone of which was laid in 1810. Besides the public offices, the circuit hall can accommodate about three hundred persons, and there are seventy-four fire rooms, and fifty-eight cells for prisoners, and two rooms with anti-apartments for persons under sentence of death, so constructed that irons are never used. When this accommodation is taken into account, and when it is considered that on 14th February, 1814, when the prisoners were removed from the old to the new jail, there were only thirty-five in all, it will be conceded that ample accommodation was provided. Moreover, the business of the circuit had hitherto been so light, that at the spring circuit of 1772, and the autumn of 1779, 1782, and 1796, there was no criminal business; and for several years after the new jail was opened, the business was comparatively easy. It was then only necessary to summon forty-five jurymen. But matters did not long remain in that position; the population of Glasgow having more than doubled since 1807, and the population, of the counties of Lanark, Renfrew and Dumbarton, which are all connected with the Glasgow circuit, has so much increased that it was found necessary to establish a winter circuit. In 1828 the Hon. Lords Gillies and Alloway opened the winter circuit. The following brief account must satisfy the most fastidious, that however ample the accommodation was when the new jail was opened, it is now not only unfit for its purposes, but disreputable to the city. In proof of the great increase of crime, it may be sufficient to refer to the business of two circuits. In the spring of 1828, the Right Hon. the Lord Justice Clerk, (Boyle) and the Hon. Lord Alloway, presided at the circuit, Archibald Alison, Esq., (now sheriff of Lanarkshire,) Advocate Depute. 115 persons were indicted; viz., males 89, females 26. 70 jurymen were summoned; viz., 26 special, and 44 common. 1369 witnesses were in attendance; viz., males 1085, females 284. 70 persons were transported,—viz., for life, males 5, females 1,—for fourteen

years, 34, viz., males 28, females 6,—for seven years, 30, viz., males 20, females 10. At the autumn circuit of 1838, the Hon. Lord Meadowbank and the Hon. Lord Cockburn presided, Cosmo Innes, Esq., Advocate Depute; the court was equally crowded as in 1828. 85 persons were transported, so that at the two circuits no less than 155 persons were banished beyond seas and 29 imprisoned.

Delicate as it ever must be to notice the manner in which the court discharges its duty, it is only an act of strict justice to say that the services rendered to society at these circuits will not soon be forgotten by a grateful community. In 1828, the court during eight days sat 93 hours, averaging nearly $11\frac{3}{4}$ per day, in a fetid atmosphere. In 1838 the duties were equally heavy; and the judgments such as to relieve this neighbourhood of a great number of worthless and dangerous characters who were ready for almost any species of depredation.

PUBLIC EXECUTIONS.

During seventy-five years, viz., from 1765 to 1840, 102 persons have been executed in this city; viz., males 95, females 7,—for murder, 24,—forgery, 7,—robbery, 36, house-breaking, 30,—treason, hamesucken, rape, throwing sulphuric acid with intent to kill, 5.* The following exhibits the proportion of executions in times of peace and war:—During twelve years, from 1765 to 1777, a time of peace, there were six executions. In seven years, from 1777 to 1784, a time of war, one. In ten years, from 1784, to 1794, a time of peace, twenty-one. In eight years, from 1794 to 1802, a time of war, three. In two years, from 1802 to 1804, a time of peace, one. In twelve years, from 1804 to 1816, a time of war, twelve. In twenty-four years, from 1816 to 1840, a time of peace, fifty-eight executions.

REMARKS.

The place of execution was originally at the Howgate head, without the Stable-green Port, and continued to be there till the basin of the Monkland Canal was erected on the spot; it was then removed to the Castle-yard, where it continued till the erection of the Royal Infirmary, it was then taken to the jail at the Cross, and continued there till the new jail was built. Since that period the public executions have taken place in front of the public offices.

James Wilson was hung and headed for high treason on 30th August, 1820. Simple and inconsiderate through life, and so thoughtless that he could never be

* A short time previous to the passing of the Act 10th, Geo. IV., cap. 38, which made shooting, with intent to kill, a capital offence, John Kean, a cotton-spinner, shot John Graham, a "nob" cotton-spinner, that is, a person who would not join the spinners' union, and worked at a lower rate than that demanded by the union. Kean was tried on 26th April, 1825, by the Right Hon. the Lord Justice Clerk, and the Hon. Lord Pitmilley, Archibald Alison, Esq., Advocate Depute. This was a most aggravated case,—Graham, pale as death, was carried into court on a board and laid on a mattress in front of the bench while giving his evidence. Kean was found guilty, and sentenced to be whipt in front of the jail, and then transported beyond seas for life.

brought to think, or to see his crime, nor the awful situation in which he was placed. When the Rev. Dr., now principal Dewar of Aberdeen, had preached what is called the condemned sermon, in the chapel of the prison, Wilson said to him, in my hearing, that he thought he was very personal. The culprit was drawn in a double seated hurdle from the jail to the scaffold, with his back to the horse. When the headsman, disguised in a black gown, with visage slightly covered, placed himself in the opposite side of the hurdle, holding up the edge of the ignominious axe, every spectator was appalled but Wilson, who seemed to be quite unconcerned. Having ascended the fatal drop as if nothing particular was to happen, he coolly said to the towns' executioner, "Thomas, did ye ever see sic a crowd?" After hanging half an hour, his body was laid on a platform. The disguised headsman then made his appearance, and with one stroke severed his head from his body, and, having held it up, exclaimed, "Behold the head of a traitor!" on this some persons in the crowd, which was unprecedentedly great, cried out, "Murder, murder."

The special commission for trying persons accused of high treason in Scotland, was composed of the heads of the four courts and the remanent Lords of Justiciary. The commission was opened at Glasgow on 20th July, 1820, by the Lord President Hope,—the Lord Justice Clerk Boyle,—the Lord Chief Baron Shepherd,—the Lord Chief Commissioner Adam, and Lord Pitmilley.

James Campbell, a native of Glasgow, was on 20th September, 1822, sentenced to be executed, for house-breaking. After much interest the sentence was commuted to transportation for life. Campbell, who had received a Grammar School education, was appointed a teacher in the Millbank Penitentiary, Westminster, where, by good conduct, he got a free pardon. He returned to Glasgow, and on 26th April, 1831, he was tried at the circuit, received sentence, and was hanged on the 16th May following, for house-breaking. His brother, Robert, was transported for life for robbery, and his brother, Duncan, fourteen years, for house-breaking,

William Heath and Elizabeth Crowder, or Tumely, were tried at the circuit court here on 14th September, 1831, by the Hon. Lord Meadowbank, and the Hon. Lord MacKenzie, for the robbery of Messrs. James and Robert Watson's bank. Heath was executed, but the libel was not proven against Crowder.

On 17th September, 1831, Elizabeth Crowder, or Tumely, was incarcerated here on a fugæ warrant; and on 20th October following, Mary Crowder, alias Mary Heath, her sister, was also incarcerated on a similar warrant, at the instance of Messrs. Watsons, for £2,185. They were also detained at the instance of the National Bank of Scotland, until they made restitution of £4,000.

These handsome women, who were at the head of a celebrated establishment in London, were full of money, and lived luxuriously. Having failed in their application to the court of Session for liberation, they appealed to the House of Lords, and were also defeated. After being nearly twelve months in the jail of Glasgow, they were liberated by the agents for the National Bank, on 10th

September, 1832. The current report at the liberation was that the bank got at least £2,000 returned to them, but that Messrs. Watson got nothing.

Prior to 1830, murderers and others in Scotland were allowed from five to six weeks from sentence till execution, but an Act was passed, restricting the period to twenty-one days. William M'Feat received sentence of death for murder, on 8th September, 1830, and was executed on 29th of same month; he was the first that was executed here at the end of twenty-one days. George Doffey was executed for murder on 7th November, 1832, and was the first who was buried within the precincts of the prison.

Hugh Kennedy was executed on 20th January, 1834, for wilfully, maliciously, and unlawfully throwing sulphuric acid in the face of James Goodwin, boots in the Buck's Head, Inn, Glasgow, with intent to murder, or maim, or to disfigure, or disable the said James Goodwin. Goodwin is still a resident in the Buck's Head Inn. Hugh Kennedy was the first, and it is believed, the only one in Scotland who was executed under the Act 10th, Geo. IV., Cap. 38.

It is a melancholy fact, that from 1830 to 1838, there were nine persons executed here for murder. James Byres, and Mary Steel, his wife, were executed for murder on 6th Oct., 1831. At the fatal drop Mrs. Byres disdainfully refused to shake hands, or to be reconciled with her husband. Elizabeth Nicholson, or Jeffray, poisoned Hugh Morrison and Ann Newall. She was executed on 21st May, 1838.

Andrew Marshall was the last person who was hung in chains here for murder; his mutilated remains and chains were clandestinely removed from the Howgate head in 1769, by the market gardeners in the neighbourhood.

WATCHING AND WARDING.

From an early period the citizens of Glasgow performed the duties of Watching and Warding, by parading the streets through the night for the protection of persons and property. This was regularly done, with partial interruptions, till a statutory police was appointed in 1800. This civic guard, or *posse comitatus*, consisted of thirty householders, who met in the Session House of the Tron Church; and it was from the carelessness of the person whose duty it was to take charge of the fires, that the church was burned to the ground on 8th February, 1793. Mr. James Brown, father to Mr. Brown of Kilmardinny, was captain of the guard on the preceding night, when he appointed me his lieutenant.

POLICE ESTABLISHMENT.

The Town Council, who had long been desirous for a separate Police, appointed an Inspector on 2d March, 1778, with a salary of £100; but this having

met with great opposition from the citizens, he resigned his office on 5th September, and it was abolished on 26th November following. The Council, still desirous for a separate police, made another effort, and on 16th November, 1783, appointed an Intendant of police, and a number of subordinate officers. The Intendant—for whom a gold chain was made—was invested with magisterial powers, and the inhabitants were directed to pay the same deference to him as to the other magistrates. Having nominated the staff of the police, the Town Council applied for an Act of Parliament to defray the expense of the proposed establishment; but as the inhabitants, who were to be assessed for its support, were not to have a vote in the election of ward commissioners, a powerful and successful opposition was set on foot, and the Bill was lost. It was not till 1800 that a Police Act was obtained for this city.

When the police was established, it was placed under the management of the Magistrates, the Dean of Guild, and the Convener of the Trades' House, and one Commissioner from each ward, chosen by the rate payers. In 1839 the establishment consisted of a superintendent, collector, clerk, surveyor, and surgeon. There are eight heads of departments, 3 lieutenants, 68 officers, 135 night-watchmen, 8 coal-weighers, 21 lamp-lighters, 50 firemen, and 20 supernumeraries—in all 313 persons. The establishment is supported by a tax on rental, averaging about 5 per cent.

PAWN-BROKERS.

The business of a Pawn-Broker was not known in Glasgow till August, 1806. At that period an itinerant English pawn-broker commenced business in a room in the High-Street, but decamped at the end of six months. On 8th June, 1813, John Graham, a town officer, opened a pawn-broker's shop in Bell-Street, which was the first regular office in the west of Scotland for receiving goods on pawn. Other individuals soon entered into the business, which increased so rapidly, that towards the end of 1820, when the working classes were in great distress, 2,043 heads of families pawned 7,380 articles, on which they raised £739 5s. 6d. Of these heads of families 1,946 were Scotch, and 97 English, Irish, or foreigners; 1375 had never applied for nor received charity of any description, 474 received occasional aid from the relief committee, which had then been established by a number of benevolent individuals, and 194 were paupers.

From the best information that can be procured, it appears that the capital invested here in this business, in 1840, is somewhere about £26,000. About nine-tenths of the articles pledged are redeemed within the legal period; and, unquestionably, much occasional relief is afforded in seasons of temporary distress by their assistance, though at the same time it is to be feared that the greater part of their trade arises from the improvident and the depraved. Were individuals of this description to lodge their savings in a provident bank during good times, they would be less dependent on the pawn-brokers.

THEATRE.

Previous to, and for some time after the Reformation, pantomimic representations of the history of our Saviour, his miracles, and passion, were exhibited in this city. On 20th February, 1670, the Magistrates of Glasgow "interdicted strolling players from running through the streets, and from performing plays in private houses, which they called the Wisdom of Solomon."

It does not appear that theatrical representations were allowed in this city from the Reformation till 1750. At that period, Mr. Burrell, a teacher of dancing at the Bell of the Brae, gave the use of his hall for that purpose. In 1752, a temporary theatre was erected against the wall of the archbishop's palace, in which the celebrated Digges, Stampier, and Mrs. Ward performed. The popular feeling against theatrical amusements was then so great that dress parties were escorted to the theatre by a military guard. Soon after this the theatre was demolished by a part of a congregation who had been hearing the celebrated George Whitfield preach in the High church yard, who denounced it as the devil's house. In 1762, Provost Ingram, Bailies Alexander Spiers, John Alston, and James Buchanan, refused to patronize Messrs. Jackson, Love, and Beate, or to give them any countenance in building a theatre; and no person could be found bold enough to sell ground for such a purpose. At length Mr. Miller of Westerton was induced to feu ground in the Grahamston suburb, (now Alston-Street) and a theatre was opened in the spring of 1764, by Mrs. Bellamy, and other respectable performers. Theatrical representations continued to be so obnoxious to the people, that a mob set fire to the stage and burned the scenery and machinery on the first night of its performance. When the damage was repaired, the performances were allowed to go on with partial interruptions, till the morning of 16th April, 1782, when the theatre was burned to the ground. Soon after this a small theatre was built in Dunlop-Street, and opened in January, 1785; but the play-goers at length thinking it too small for the city, erected one in Queen-Street, which was opened on 24th April, 1805, at an expense of £18,500, in shares of £25. It was let on lease at £1,200, but the lessee failed. It was then let at £800, but this could not be paid. The rent was then reduced to £400; and ultimately the building was sold at a price only equal to the outstanding debts and ground rent. On the forenoon of 10th January, 1829, this splendid edifice was burned to the ground—a gas light having come in contact with the ceiling of one of the lobbies leading to the upper gallery. From that time till 1839 the play-goers contented themselves with the old theatre in Dunlop-Street. During the latter end of that year the old theatre was pulled down, and one of a larger and more elegant description is being erected in its stead.

 COCK-PIT.

Forty years ago the cock-fighters in Glasgow found it necessary to amuse themselves in a clandestine manner in cellars. In 1807, the amateurs finding a vacant building in Queen-Street, made preparations for fighting a main; but when the

sport had just commenced, a portion of the city and county magistrates made their appearance and dismissed the meeting. Since that period mains have been occasionally fought here without the interference of the authorities. Of late, however, the taste for cock-fighting has so much increased, that, in 1835, a spacious building was erected in Hope-Street, for a cock-pit, on the joint stock principle. This pit, which is seated for about 250 persons, has suitable accommodation for the judges, handlers, and feeders, and is inferior in nothing to the Westminster one but in its dimensions. The company who usually frequent the Glasgow cock-pit do not belong to the "*exclusives*," for here all grades are to be found, from the senator to the journeyman butcher.

ABSTRACT VIEW OF THE STATE OF SOCIETY IN GLASGOW AT VARIOUS PERIODS.

From 1500 to 1550:—During this period the inhabitants of Glasgow and neighbourhood were governed by churchmen, who kept them in such a state of ignorance and superstition as was truly deplorable. Towards its termination, the principles of the glorious Reformation began to be acknowledged, when it pleased God to raise up powerful agents in Edinburgh and Glasgow in the persons of Knox and Melville.

From 1550 to 1600:—The Reformation took place during this period. The great body of the people, however, still retained their fierce and sanguinary disposition. This is strikingly marked in their being constantly armed,—even their ministers were accoutered in the pulpit. The number of murders, cases of incest, and other criminal acts, which were turned over to the censures of the church, but too plainly point out the depraved character of the people.

From 1600 to 1650:—The distinguishing character of the people during this division of time, is marked by a certain malignity of disposition. Their belief in, and treatment of witches, second sight, &c., afford strong symptoms of superstition grounded on ignorance, and the profanation of the Sabbath, by working and rioting on that day, displays great profanity. The belief in witches was not confined to the common people, for, so late as the 12th March, 1698, "the magistrates of Glasgow granted an allowance to the jailor for keeping warlocks and witches imprisoned in the tolbooth, by order of the *Lords Commissioners of Justiciary*." It seems that little attention had yet been paid to cleanliness, as on the 6th October, 1610, the Town Council enacted "that in future there should be no dunghills on the principal streets, nor in the flesh market, meal, or other market, under a penalty of 13s. 4d., and that no timber, nor peat stacks lie on the High-Street, above a year and a day; nor lint dried on the High-Street." On 18th August, 1640, the Kirk Session enacted, that the city Ports should be shut on Sabbath at noon, so that no traveller go out or come into the Town, and that watchers be appointed where there are no Ports, because of the "*HIELAND men*."

From 1650 to 1700:—During the beginning of this period, and the end of the

former, the people, who had become more civilized, and paid more attention to moral and religious duties, were dreadfully harassed and persecuted by an intolerant government, who seemed determined to enforce a form of religion that was inimical to the people. Towards the beginning of this period, nine covenants were hanged in Glasgow, and their heads stuck on pikes on the jail. Their graves were covered with what is called the "Martyrs' stones," one of them is now placed on the north facade of the Cathedral, on which there is a poetical inscription. A detailed account of what took place at that eventful period, in connexion with this city, may be found under the article "GLASGOW," which I drew up for the two Edinburgh Encyclopædia Britannicas, the one edited by Sir David Brewster, and the other by Professor Napier, and more particularly under the article "GLASGOW," which I subsequently drew up for the New Statistical Account of Scotland for the benefit of the sons and daughters of the clergy. The abdication of James II. and with him the exclusion of the Stuart family, brought about the happy Revolution, which put an end to the religious troubles.

The union with England, in 1707, opened up a spirit for trade hitherto unknown in Scotland. This great measure, which met with so much opposition in Scotland, and no where more so than in Glasgow, contributed greatly to the prosperity of that city.

At the time of the union, and for half a century after it, the habits and style of living of the citizens of Glasgow, were of a very moderate and frugal cast. The houses in the early part of this century were, almost without exception, covered with thatch, and those occupied by the highest class of citizens contained only one public room, a dining room, and even that was used only when they had company—the family at other times usually eating in a bed-room. The great grandfathers and great grandmothers of many of the present luxurious aristocracy of Glasgow, and who were themselves descendants of a preceding line of burgher patricians, lived in this simple manner. They had occasionally their relatives dining with them, and gave them a few plain dishes put on the table at once,—holding in derision the attention which they said their neighbours, the English, bestowed on what they ate. After dinner the husband went to his place of business, and in the evening to a club in a public house, where, with little expense, he enjoyed himself till nine o'clock, when he went home to his family. The wife gave tea at home in her bed-room to her female acquaintances, the husband seldom favouring them with his company. This meal was termed the "*four hours.*" The people were in general religious, and, about 1745, particularly strict in their observance of the Sabbath; some of them indeed, to an extent that was considered by others to be extravagant. There were families who did not sweep or dust the house, did not make the beds, or allow any food to be cooked or dressed on the Sabbath. There were some who opened only as much of the shutters of their windows as would serve to enable the inmates to move up and down, or an individual to sit at the opening to read.

Influenced by a regard for the Sabbath, the magistrates employed persons termed "compurgators," to perambulate the city on the Saturday nights, and when, at the approach of twelve o'clock, these inquisitors happened to hear any noisy conviviality going on, even in a private dwelling-house, they entered it and

dismissed the company. Another office of these compurgators was to perambulate the streets and public walks during the time of divine service on Sunday, and to order every person they met abroad, not on necessary duty, to go home, and if they refused to obey, to take them into custody. The employment of these officials was continued till about 1750, when taking Mr. Peter Blackburn, father of Mr. Blackburn of Killearn, into custody for walking on the public green on Sunday, he prosecuted the magistrates for an unwarrantable exercise of authority, and prevailing in his suit in the Court of Session, the attempt to compel this observance was abandoned.

The wealth introduced into the community after the union, gradually led to a change in the habits and style of living of the citizens. About the year 1735, several individuals built houses to be occupied solely by themselves, in place of dwelling on a floor entering by a common stair, as they had hitherto done. This change, however, proceeded very slowly, having been retarded by the effects of the rebellion of 1745, so that up to the year 1755, very few of these single houses had been built. At that period there were only three houses from Virginia-Street to Anderston, about a mile distant, excepting a few hovels, malt kilns, and barns; now the whole line is filled up with shops and elegant houses.

About the year 1740, the intercourse of society was by evening parties, invited to tea and supper. They met at four, and after tea played cards till nine, when they supped. The gentlemen who attended these parties did not go home with the ladies, but continued to sit with the landlord drinking punch to a late hour, which very frequently ended in dissipation. Sometimes the gentlemen had dinner parties in their own houses, but it was not till a much later period that the great business of visiting was attempted to be carried on by dinner parties.

The dinner hour about the year 1770, was two o'clock, soon after that it came to be three o'clock, and gradually became later, till about 1828, it reached six o'clock. The first instance of a dinner of two courses in Glasgow, was about the year 1786. Mrs. Andrew Stirling of Drumpeller, who made this change in the economy of the table, justified herself against the charge of introducing a more extravagant style of living, by saying, that she had put no more dishes on her table than before, but had merely divided her dinner in place of introducing her additional dishes in removes.

Previous to the breaking out of the American war, the Virginians, who were looked up to as the Glasgow aristocracy, had a privileged walk at the Cross, which they trod in long scarlet cloaks and bushy wigs; and such was the state of society, that when any of the most respectable master tradesmen of the city had occasion to speak to these tobacco lords, he required to walk on the other side of the street, till he was fortunate enough to meet the eye of the patrician, for it would have been presumption to have made up to him. Such was the practice of the Cunninghams, the Speirs, the Glassfords, the M'Caulls, and others, and from that servility the Langs, the Ferries, the Claytons, and others, who were at the head of their professions, and had done much to improve the mechanical trade of the city were not exempt. At that period the religious feeling of former days seems to have been forgotten, for profane swearing was considered a gentlemanly quali-

fication, and dissipation at entertainments was dignified with the appellation of hospitality and friendship, and he who did not send his guests from his house in a state of intoxication, was considered unfit to entertain genteel company. Latterly, the rising generation of the middle class, better educated than their fathers, engaged extensively in trade and commerce, and by honourable dealing, and correct conduct, procured a name and a place in society which had been hitherto reserved for the higher grades. Since the opening of the public coffee-room in 1781, the absurd distinction of rank in a manufacturing town has disappeared. Wealth is not now the criterion of respect, for persons even in the inferior walks of life, who conduct themselves with propriety, have a higher place assigned them in society, than at any former period of the history of the city.

The houses in the streets of this city, with very few exceptions, are all built of stone, ashler, and covered with slates. Families who were formerly content to live in the flat of a house in the old, have now princely self-contained houses in the new parts of the town. Entertainments are now given more frequently, and the mode of giving them is materially changed. Persons who formerly gave supper parties and a bowl of punch, are now in the way of giving sumptuous dinners, entertaining with the choicest wines, and finishing with cold punch, for which Glasgow is so celebrated. The value of the table service, and the style of furniture in the houses of many of the Glasgow merchants, are inferior to none in the land. In drinking there is a mighty improvement; formerly guests had to drink in quantity and quality as presented by their host, now every person drinks what he pleases, and how he pleases, after which he retires to the drawing-room, and drunkenness and dissipation at dinner parties are happily unknown. Profane swearing is considered highly reprehensible; so much so, that swearing in good society is never heard. The industrious working classes are better lodged, clothed, and fed than formerly.

The inhabitants are justly characterized as charitable and humane, and on all proper occasions the feeling of compassion and of active benevolence is never wanting. Though this be the general, it is by no means the universal character of the population; for there are many persons among us who live as if they existed only for themselves, and desire to know nothing but what may be conducive to their own private advantage. Persons who are placed in circumstances above the labouring artizan, may be classed in three divisions.

The first in order, but last in respect, are those who, though wealthy, or at least in easy circumstances, lend a deaf ear to the tale of woe, and neither contribute their time nor their means to the relief of the indigent or the wretched.

The second are those who give none of their time to the public, and whose charities are in a manner extorted through the influence of respectable applicants, or the force of public opinion. Than this class, who may be considered the drones of society, there are none more ready to find fault with the administrators of the public or charitable concerns of the town.

The third class are those who voluntarily contribute their time and their money to the service of the community in the various departments of usefulness.

Through the kind providence of God, this class, of late years, has greatly increased in number, respectability of character, and worldly estate, which, when combined with other elements, have tended greatly to the increase of religion, morality, and active benevolence. The spirit which actuates the benevolence of Glasgow is ever present in times of difficulty. The knowledge of this important fact should tend greatly to prevent discontent in the minds of the comparatively poor and indigent, and mitigate their sufferings in times of distress.

APPENDIX.

POPULATION IN ITS SOCIAL AND ECONOMICAL RELATIONS.

Parliament having resolved on a decennial census, commencing in 1801, the Government fixed on John Rickman, Esq., one of the clerks of the House of Commons, to take the entire charge of that most important and difficult matter; and their choice has been most fortunate for the country, as that gentleman to great learning adds business habits in no ordinary degree. The Government appreciating the great importance of Mr. Rickman's four decennial enumerations, appointed George R. Porter, Esq., to compile the National and Foreign Statistics for the Board of Trade; and that gentleman, in combining portions of the general enumerations with his own, has shed a lustre on the science of political arithmetic which it did not formerly possess, and has been of great use to the trade of the country.

The following statement, taken from Mr. Porter's work,—*Progress of the Nation*,"—shows the total number of persons, distinguishing males from females, who were living in England, Wales, Scotland, Ireland, and the British Isles of Guernsey, &c., at the enumeration of 1831.

	Males.	Females.	Total No. of persons.	Males 20 years, and upwards.
England, ...	6,376,627	6,714,378	13,091,005	3,199,984
Wales, ...	394,563	411,619	806,182	194,706
Scotland, ...	1,114,816	1,250,298	2,365,114	549,821
Army, Navy, &c., . . .	277,017		277,017	
Total of Great Britain,	8,163,023	8,376,295	16,539,318	3,944,511
Ireland:—				
Leinster, ...	927,877	981,836	1,909,713	465,953
Munster, ...	1,093,411	1,133,741	2,227,152	542,200
Ulster, ...	1,113,094	1,173,528	2,286,622	540,479
Connaught, ...	660,498	683,416	1,343,914	319,133
Total of Ireland, . . .	3,794,880	3,972,521	7,767,401	1,867,765
Total of Great Britain } and Ireland, . . . }	11,957,903	12,348,816	24,306,719	5,812,276
Island of Guernsey, &c.,	11,983	14,145	26,128	6,236
Jersey, ...	17,006	19,576	36,582	8,747
Man, ...	19,560	21,440	41,000	9,630
Total of British Islands,	48,549	55,161	103,710	24,613
Total of United Kingdom,	12,006,452	12,403,977	24,410,429	5,836,889

It appears from the foregoing table that the proportion between the sexes differs in the different parts of the kingdom.

	Males.	Females.	Males of 20 years.
Thus in England the proportion is .	48.71	51.29	24.44
Wales, ...	48.94	51.06	24.15
Scotland, ...	47.14	52.86	23.24
Great Britain, (includ. Army, &c.,)	49.36	50.64	25.52
Ireland, ...	48.85	51.15	24.04
Great Britain and Ireland, .	49.20	50.80	23.91
Guernsey, ...	45.86	54.14	23.87
Jersey, ...	46.49	53.51	23.91
Isle of Man, ...	47.71	52.99	23.48
British Islands, ...	46.81	53.19	23.73
United Kingdom, ...	49.18	50.82	23.91

The proportion between the two sexes in the whole of France at the last census was 48.94 males to 51.06 females—showing a greater disparity than exists in the United Kingdom—while in Spain, according to the census in 1803, the latest to which we have access, in which the numbers of the different sexes are distinguished, the difference was exceedingly minute, scarcely more indeed than 1 in 100; the proportion of males being 49.72, and of females, 50.28. In the United States of America the numbers of free white persons at the enumeration of 1820, were of males, 3,995,053, and of females, 3,866,657; showing precisely the reverse of what appear to be the relative numbers in this country, the proportions being 50.82 males to 49.18 females.

The census taken for the United Kingdom in 1821, gives 10,159,644 as the number of males, and 10,714,514 as the number of females then living; showing the proportion between the two sexes to be 48.67 males to 51.33 females. At that period (1821) the ages were given in classes, so far as related to the inhabitants of Great Britain, but not with completeness, the returns being in fact deficient to the extent of 1,584,954 persons whose ages are not stated, 743,126 of whom were males, and 841,828 females. If allowance be made for this deficiency on the supposition that it applies in equal proportion to every class of ages, it will then appear that the males of twenty years of age and upwards, who were living in Great Britain in 1821, bore the proportion of 239 to 1000 of the whole population, which agrees entirely with the proportion established for the whole kingdom in 1831, as already shown.

The mode at present employed for ascertaining the progress of the population in France is the same as that by which the population of England and Wales has been calculated for the eighteenth century; and the law of that country respecting the registrations of births and burials is so strictly enforced, that there is good reason for relying upon the general accuracy of the computations derived from those documents. It would not be satisfactory to draw any comparison between the population returns of our own country during the last thirty years, owing to the great changes made during a part of that time in the extent of the French territory; but we may obtain satisfactory means of comparison by carrying back the inquiry ten years further, to a time before additions were made to the territory of the ancient monarchy.

In 1791 a Committee of the Constituent Assembly, appointed for the purpose of inquiring concerning the population of the kingdom, reported that it amounted to	26,363,000
In 1817, when France had been again reduced by the treaty of Paris to its ancient limits, the population returns gave a total of	29,217,465
In 1825 the numbers were	30,451,187
And in 1831, when the last computation was made, France contained a population of	32,560,934

The increase according to these statements has amounted

In 40 years, between 1791 and 1831, to	6,197,934, or $23\frac{1}{2}$ per cent.
26 years, between 1791 and 1817, to	2,854,465, or $10\frac{4}{5}$ —
8 years, between 1817 and 1825, to	1,233,722, or $4\frac{1}{4}$ —
6 years, between 1825 and 1831, to	2,109,747, or 7 —

It will be seen that these rates of increase are widely different from those which have marked the progress of population in this kingdom. In the forty years previous to 1831, the increase of numbers in England and Wales was equal to $62\frac{3}{4}$ per cent.; showing an advantage in favour of England in the proportion of eight to three. If the comparison be made with reference to the period between 1817 and 1831, it will be found that while the increase in the French population was 11.44 per cent. in fourteen years, or after the rate of about eight-tenths per cent. (.82) annually, the increase of the united kingdom was after the rate of about $1\frac{3}{5}$ per cent. (1.58) annually. According to these rates of increase, the population of the united kingdom would double itself in about forty-eight years, while at the rate experienced in France, a similar result would not be produced in less than eighty-eight years.

In both countries the increase here stated has been the result, not of an increased proportion of births, for in fact the births, if calculated with relation to the numbers of the people, have diminished, but of a diminished proportion of deaths. In France, the births which in 1817 were in the proportion of 1 in 31, were in 1834 in the proportion of 1 in $33\frac{3}{4}$; while the deaths which in 1817 were 1 in $39\frac{1}{3}$, were diminished in 1834 to 1 in 41. In England the proportions of births and deaths, at different periods, since the beginning of the century, have been as follows:—

For ten years preceding 1811, ...	births, 1 in $31\frac{1}{3}$
—	deaths, 1 in $53\frac{3}{4}$
— 1821, ...	births, 1 in $31\frac{3}{4}$
—	deaths, 1 in $60\frac{1}{2}$
— 1831, ...	births, 1 in $34\frac{1}{4}$
—	deaths, 1 in $58\frac{1}{2}$

The estimated proportions of deaths in the course of the preceding century were—

1700, ...	1 in $39\frac{4}{5}$	1770, ...	1 in $41\frac{1}{5}$
1710, ...	1 in $36\frac{1}{10}$	1780, ...	1 in $41\frac{1}{2}$
1720, ...	1 in $35\frac{1}{2}$	1785, ...	1 in $41\frac{3}{4}$
1730, ...	1 in $31\frac{1}{10}$	1790, ...	1 in $45\frac{1}{5}$
1740, ...	1 in $35\frac{1}{5}$	1795, ...	1 in $47\frac{1}{5}$
1750, ...	1 in $40\frac{2}{5}$	1800, ...	1 in $47\frac{3}{4}$
1760, ...	1 in $41\frac{1}{5}$		

Showing in this respect a continually diminishing mortality. This effect, so strongly indicative of amendment in the condition of the people, must be attributed to the concurrence of various causes. Among these may be mentioned, the less crowded state of our dwellings,—the command of better kinds of food and medical assistance,—the superiority and cheapness of clothing,—and probably also, more temperate habits, and greater personal cleanliness. One influential cause of the diminished rate of mortality will be found in the introduction of vaccination, which has had so powerful an effect in diminishing the rate of mortality among children; besides which the extensive surface drainage which has been going forward in those parts of the country which, owing to the presence of stagnant rivers, were once productive of intermittent fevers, has added to the general healthiness of the country.

The superiority of this country over others in respect of the comparative rates of mortality, may be seen in the following statement of the annual proportions of deaths to the whole population in the different countries named, which was communicated to Mr. Rickman by Sir Francis D'Ivernois, a gentleman who has devoted his attention for many years to the elucidation of various phenomena relating to the law of mortality.

England and Wales, 1 death in	59
Sweden and Denmark, 1 death in	48
Holland and Belgium, 1 death in	43
France, 1 death in	40
United States of America, 1 death in	37
Prussia, 1 death in	36
Wirttemberg, 1 death in	33

DETAIL OF THE POPULATION OF THE CITY AND SUBURBS OF GLASGOW.

There is no enumeration of the inhabitants of Glasgow that can be relied on before the year 1610, but there are grounds for supposing that about the time of the Reformation, in 1560, the population amounted to 4,500.

In the year 1581, the Confession of Faith was assented to in this city by 2,250 persons above twelve years of age. The elders went from house to house to procure the assent. It would appear that the population was then chiefly confined to the High-Street, Gallowgate, Trongate, Saltmarket-Street, Bridgegate, and Stockwell-Street, as the assents were all collected in these streets.

In 1610, the Episcopal mode of government having been resumed in the church, Archbishop Spottiswood directed the population of the city to be ascertained, when it was found to amount to 7,644.

In 1660, at the restoration of Charles II., the population amounted to 14,678.

In 1688, at the revolution, the population had decreased to 11,948. The Civil wars are assigned as the cause of the decrease, and it is a curious historical fact, that the number fell off immediately after the restoration of Charles II., and that it required more than half a century to make up what it had lost.

In 1708, immediately after the union with England, the population amounted to 12,766. This enumeration was made by direction of the magistrates to mark the falling off which they contemplated.

In 1712 the population amounted to 13,832. This was made by order of the Convention of Royal Burghs, who directed each of the Burghs to make a return of its population on oath.

In 1740 the population was ascertained by the magistrates to be 17,034.

In 1755 the population had increased to 23,546, but this enumeration included persons living in houses which had been built adjoining to, but without the royalty. At that period the magistrates directed returns to be made for the Rev. Dr. Webster, then preparing his scheme for the Ministers' Widow's Fund.

In 1763 the population amounted to 28,300. This enumeration was drawn up by Mr. John Woodburn, the City Surveyor.

In 1780 the population had increased to 42,832, but in this enumeration the suburban parishes of Barony and Gorbals were for the first time included.

In 1785, soon after the termination of the American war, the magistrates directed the population to be ascertained; it then amounted to 45,889.

In 1791 the population was ascertained for Sir John Sinclair's National Statistical Work. At that time it amounted to 66,578, including 4,633, being part of the suburbs which had been omitted in the return.

Prior to 1831 the general results only of the different enumerations were preserved, but in that year a census of the inhabitants of Great Britain was taken for the first time, by order of Government, when the population of Glasgow and the suburban parishes of Barony and Gorbals amounted to

77,385.....viz., Males, 35,007.....Females, 42,378.

But in this enumeration, a part of the connected suburbs, the population of which amounted to 6,384, had been omitted, and which, added to the above, made the actual population of Glasgow at that time 83,769.

In 1811 there was another Government enumeration of the inhabitants of Great Britain, according to which the population of Glasgow, &c., was as follows:—

100,749.....viz., Males, 45,275.....Females, 55,474.

But, in like manner, a part of the connected suburbs, the population of which amounted to 9,711, had not been included in this enumeration, and which, added to the Government table, make the population of the city at that period 110,460.

In 1819 I drew up the first classified enumeration of the inhabitants, according to which the population of the city and suburbs amounted to

147,197.....viz., Males, 68,994.....Females, 78,203.

In 1821 there was another Government enumeration of the inhabitants of Great Britain, when the population of Glasgow, &c., was

147,043.....viz., Males, 68,119.....Females, 78,924.

In 1831 there was a fourth enumeration of the inhabitants of Great Britain according to which the population of Glasgow, &c., was

202,426.....viz., Males, 93,724.....Females, 108,702.

It appears from the population abstract for a period of ten years, viz., from 1821 to 1831, that the decennial increase is 37.66 per cent.; assuming the increase during the last nine years to be in the proportion of 38 per cent., the population in 1840 will be 271,656 souls.

NUMBER OF INSANE PERSONS IN THE LUNATIC ASYLUM, GARN-GAD HOUSE PRIVATE ASYLUM, AND THE TOWN'S HOSPITAL; AND THE NUMBER OF PATIENTS IN THE ROYAL INFIRMARY, &c., &c., ON 25TH MARCH, 1831.

AGES.											
INSANE, &C.	5 to 10.	10 to 15.	15 to 20.	20 to 30.	30 to 40.	40 to 50.	50 to 60.	60 to 70.	70 to 80.	80 to 90.	Total.
Insane, Males, . . .	0	0	5	24	29	19	15	6	1	0	99
Do. Females, . . .	0	0	2	15	24	28	29	13	1	1	113
Total Insane,* . . .	0	0	7	39	53	47	44	19	2	1	212
Idiots, Males, . . .	0	0	2	2	2	0	1	1	0	0	8
Do. Females, . . .	0	0	0	1	1	1	0	0	0	0	3
Total Idiots, . . .	0	0	2	3	3	1	1	1	0	0	11
Silly in Mind, Males, .	0	0	0	3	3	0	1	2	0	0	9
Do. Females,	0	0	0	3	9	8	6	3	3	0	32
Total Silly in Mind,	0	0	0	6	12	8	7	5	3	0	41
Total Insane, Idiots & Silly in Mind, . . .	0	0	9	48	68	56	52	25	5	1	264

* "If there is one circumstance of human life," says an eloquent author, "more calculated than any other to humble pride, and to repress vanity, that circumstance is to be found in the maniac's cell. The reflection that a hair-breadth's boundary separates the visitant from the tenant of that solitary abode, appals the loftiest spirit till it droops in sadness. To witness the wreck of intellect, and the throne where reason sat supreme, dark and deserted; the eye which but yesterday sparkled with intelligence, bent to-day in gazing on vacancy,—oh! it is indeed a melancholy, heart-rending sight, almost too much for frail mortality to contemplate."

NUMBER OF PATIENTS IN THE ROYAL INFIRMARY.											
Patients, Males, . .	7	19	16	30	23	24	12	11	1	0	143
Do. Females, . .	5	10	17	44	36	30	16	2	1	0	161
Total Patients,* . .	12	29	33	74	59	54	28	13	2	0	304
NUMBER OF PERSONS IN THE LOCK HOSPITAL AND MAGDALENE ASYLUM.											
Lock Hospital, Fem.	0	0	12	11	4	0	0	0	0	0	27
Magdal. Asylum, Fem.	0	0	13	20	0	0	0	0	0	0	33
Total in Lock and } Magdalene, . . }	0	0	25	31	4	0	0	0	0	0	60
NUMBER OF PUPILS IN THE DEAF AND DUMB INSTITUTION.											
Deaf & Dumb, Males,	8	11	3	0	0	0	0	0	0	0	22
Do. Females,	5	6	3	1	0	0	0	0	0	0	15
Total Deaf & Dumb,	13	17	6	1	0	0	0	0	0	0	37
NUMBER OF BLIND IN THE BLIND ASYLUM AND IN THE TOWN'S HOSPITAL.											
Blind, Males, . . .	1	3	7	9	5	1	0	0	0	0	26
Do. Females, . .	0	2	1	4	1	2	0	2	1	1	14
Total Blind, . . .	1	5	8	13	6	3	0	2	1	1	40
NUMBER OF PATIENTS IN THE EYE INFIRMARY.											
Patients, Males, . .	0	0	1	0	0	0	1	0	0	0	2
Do. Females, . .	0	0	0	1	0	1	0	0	0	0	2
Total, ...	0	0	1	1	0	1	1	0	0	0	4
Number of Persons in the above Asylums and Hospitals on 25th March, 1831, 709.											

On 20th January, 1840, there were 70 blind pupils in the Asylum, and 8 blind persons in the Town's Hospital. There were also 74 deaf and dumb children in the Deaf and Dumb Asylum; viz., 38 boys, and 36 girls—the ages are nearly the same as in the foregoing table. The number of in and out-door patients belonging to the Eye Infirmary has been also considerably increased. The mansion-house and

* It was eloquently expressed in a late report of the Royal Infirmary, "when to the pains of sickness are added the horrors of poverty,—when the sufferer pines away in obscurity, unseen or unheard,—when no kind relative is near to soothe his sorrows or supply his wants, then his heart is ready to sink within him. At such a moment the hand of benevolence throws open his hospitable mansion and dissipates despair. In heavenly accents it invites to enter its friendly portals, without money and without price."

grounds of Dalbeth have been formed into a retreat for the insane. The number of the insane at present in the Asylums is studiously omitted. On 31st December, 1839, there were 343 patients in the Infirmary; viz., in the front house, 215; fever house, 133. Since the Infirmary was opened in 1794, 84,447 patients have been admitted. Cost of each patient, annual average during the term of four decades and a half,—1795—1804, £2 13s. 5.4; 1805—1814, £3 1s. 5.4; 1815—1824, £2 9s. 10.0; 1825—1834, £1 18s. 4.5; 1835—1839, £1 8s. 8.0.

The attempt to ascertain the number of Insane, Idiots, and persons Silly in Mind, living in family with their friends, has failed. The same remark applies to the Blind.

The following is an excerpt from the Infirmary Report for 1839, ably drawn up by Doctor James Watson, one of the managers—"Whether we think of the necessary increasing number of sick-poor in a manufacturing community like ours, who are destitute of the means in the time of their distress of procuring medical aid or application,—whether we imagine to ourselves the effect on the poor's rates, were the 4000 or 5000 persons annually restored to health and usefulness through the instrumentality of the Infirmary, to be reduced to penury or untimely old age, or removed from their helpless families by the ravages of disease,—or whether, in respect of contagion, we consider what would be the result were the cases of fever and small-pox now secluded within our walls—there enjoying every means of recovery which enlightened attention can afford—permitted to continue in the crowded closes and alleys of our city,—the claims of the Institution whose cause we are pleading must appear paramount."

CONCERNING CHOLERA MORBUS.

After the lapse of nearly two centuries this city, in common with other parts of the country, had a return of what may be termed the plague. Cholera Morbus made its appearance here on 19th February, 1832, and terminated on 11th November following. At the termination of the epidemic, the secretary, James Corkindale M.D., LL.B., and I, as a member of the Board of Health, drew up details, of which the following is an abstract:—Cases, 6208; deaths, 3005; recoveries, 3203. There was one case for about every $32\frac{1}{2}$ persons in the community, one death for about $67\frac{1}{3}$, one victim for about every 6.76-100th, and one death for about every *thirteen* families. Had the epidemic completed the year in the same proportion, it would have cut off 4123 persons, that is, 1 out of every 54 of the population. During the continuance of the epidemic, prayer meetings were held in all the churches, and at its termination there was a general thanksgiving to Almighty God.

SIGHTHILL CEMETERY.

A Joint Stock Company has been recently formed under the appellation of the "City Burial Ground Institution, and Pere la Chaise of Sighthill," who have selected burial ground on the lands of Sighthill, which lies on the west side of the road leading to Kirkintilloch,—is a mile and a quarter from the Cross, and about half a mile beyond St. Rollox toll bar. It is proposed that a portion of this Cemetery be sold in lairs, at moderate prices, to suit the wants of the working classes.

PUBLIC HEALTH IN SCOTLAND.

The Earl of Haddington, in his place in Parliament, on 2d July, 1840, took occasion to observe, that he understood from the public newspapers, that the English Poor Law Commissioners had received instructions to examine, in a similar manner to that which had been done in England, the causes of fever among the poorer classes, in the various towns in Scotland, and the best mode of preventing it. Now, though he thought this a very desirable inquiry, he did not think the English Poor Law Commissioners, not being possessed of local knowledge, the proper persons to whom it should be entrusted. He moreover, thought an inquiry in Glasgow and Edinburgh would be sufficient for the purpose, and was afraid that it would excite in Scotland a feeling of apprehension that the Government intended to interfere with the Scotch system of Poor Laws. He therefore asked, whether instructions had been sent, and what those instructions were; whether the Commissioners had any power to inquire into the working of the Scotch Poor Law System; and whether there would be any objection to lay the instructions on the table?

The Marquis of Normanby (her Majesty's Principal Secretary of State for the Home Department) explained the circumstances attending the origin of the inquiry in England, and said it had been requested by the Town Council and College of Surgeons of Edinburgh, that the commission should extend to Scotland, and shortly afterwards a petition to the same effect came from Glasgow. He (Lord Normanby) then thought that there really was a desire that the inquiry should be extended to that country, and on this account he was induced to extend it. It was not intended that the inquiry should be at all connected with the Poor Laws. There was no doubt instructions had been issued from the Treasury; and he trusted the rest of the inquiry would be as productive of benefit to Scotland as it had been to England. He had no objection to produce these instructions.

The Earl of Haddington said it was very satisfactory to him to hear that this Commission was not to tamper at all with the Scotch Poor Laws. It appeared to him, that the known cleanliness of the Scotch character,* rendered such an inquiry less necessary in that country than in many others.

* Vide p. 33.

EMINENT MEN CONNECTED WITH GLASGOW.

JAMES DENNISTOUN, ESQ., OF BARBACHLAY.

Mr. Dennistoun, one of his Majesty's Deputy Lieutenants for the county of Lanark, was for many years an eminent merchant in this city. In 1809 he established the Glasgow Bank, and was the principal partner and manager till he retired from business in 1829. On that occasion a number of the principal inhabitants of the city and neighbourhood, taking into consideration the high character which Mr. Dennistoun bore in the community, and the estimation in which he was held by all classes, resolved to request his acceptance of a public dinner as a mark of their esteem and regard. The invitation having been accepted, the dinner was given in the Royal Exchange Coffee-Room, on 2d December, 1829.

The Hon. Alexander Garden of Croy, Lord Provost, in the chair, supported by Sir John Maxwell, Bart., of Polloe, and Archibald Campbell, Esq., of Blythswood; Samuel Hunter, Esq., croupier, supported by William Smith, Esq., of Carbeth Guthrie, late Lord Provost, and James Monteath, Esq., of Cape. Upwards of four hundred gentlemen of the first respectability, of all shades of politics, churchmen and dissenters, dined in honour of the occasion.

The speech of the chairman, in proposing the toast of the evening, was distinguished for fine feeling and graceful delivery. After some introductory remarks, his lordship said,—“We are assembled this evening to pay a tribute to the excellence of the character of our guest on my right; and certainly I hazard nothing when I say that never was tribute more rightly deserved, or more sincerely offered, for the manifestation of our admiration of such genuine worth is alike due to him and honourable to ourselves. Johnson said of Burke, that ‘no one could by chance take shelter with him in a shed to shun a shower, without perceiving that he was a great man.’ Now, it may be said of Mr. Dennistoun with truth, that no man could meet him, however trivial the occasion, without perceiving that he was a good man. But I am aware, gentlemen, that you all know the estimable qualities for which our friend is so much beloved,—that you all know his warmth of heart, his social kindness, his unassuming but manly manner, his liberality in business, and his generosity in friendship; and I feel most confident that I speak not only the sentiments of every one present, but of every one who has the good fortune to know Mr. Dennistoun, when I assert that if ever a man possessed the full and undivided esteem and respect of society during a long period of active usefulness, it was Mr. Dennistoun,—and if ever a man carried with him to the great enjoyments of active life the affectionate good wishes of all, it was Mr. Dennistoun,—and, gentlemen, I shall only add, because it is to the honour of humanity, that I do believe he is without an enemy.”

Kirkman Finlay, Esq., of Castle Toward said,—“Their guest was now in some measure to be withdrawn from public life, and he knew there was happiness and comfort prepared for him in the bosom of his family—long might he continue to enjoy it. He had the pleasure of Mr. Dennistoun's acquaintance for nearly half a century, and during that period his advice and instruction had been of the greatest benefit to him. Among the many excellent qualities which he possessed, there was

one which an eminent writer of our own country had declared to be worth tens of thousands—namely, that of always seeing the bright side of things. By the exercise of that feeling he had cheered and comforted many who would but for him have sunk under their difficulties.”

The Rev. Dr. Chalmers, in concluding an eloquent eulogium, said that “he was unacquainted with the operations of bankers, but he had found out, so far as Mr. Dennistoun was concerned, that if money came in, it came as fully and freely out. Give me,” said the Rev. Doctor, “something like a general display of that wholesale liberality so nobly exemplified by my friend Mr. Dennistoun, and ere long *righteousness shall run down our streets like a mighty river.*”

Mr. Dennistoun returned thanks to the gentlemen whose speeches had immediate reference to him, in a very feeling and appropriate manner. He was born at Newmills, in the parish of Campsie, and died at his residence, Golfhill, on 19th October, 1835, aged seventy-eight years. He left two sons, and five daughters. Alexander represented the county of Dumbarton in the last Parliament, and John is at present one of the members for Glasgow, on what is called the liberal interest.

While I take pleasure in recording the character of an individual so honourable to humanity, I feel proud in acknowledging that for a long period, up to his death, I had the happiness of a full share of Mr Dennistoun’s friendship, the grateful recollection of which I fondly cherish.

HENRY MONTEITH, ESQ. OF CARSTAIRS.

Mr. Monteith was early initiated in trade, his father being an extensive manufacturer of cambrics, lawns, muslins, &c.* After carrying on the business of a muslin manufacturer to a large extent, Mr. H. Monteith assumed partners, and, in 1802, established a manufactory of Bandana handkerchiefs at Barrowfield, and subsequently a calico printing concern on a large scale. The company have also extensive spinning and weaving mills at Blantyre. This establishment comprises an entire town, with every necessary accommodation; school houses and a church established on the non-intrusion principle, the Company giving the heads of families the choice of their minister. Several thousand persons are employed in their various establishments, which are now the entire property of Mr. Monteith and his family.

Thus far Mr. Monteith may have equals, who, like him, have realized splendid fortunes in the most honourable manner, but he has no compeer in this district of country in acts of charity and pure benevolence; while in the comfort and splendour of his domestic economy he is inferior to none in the land.

Mr. Monteith is a deputy-lieutenant of Lanarkshire; was Lord Provost of Glasgow in the years 1815-1816, in 1819 and 1820, member of Parliament for the Lanark district of burghs, from 1821 to 1826, and again in 1831. Having retired from active business, Mr. Monteith purchased the extensive manor of Carstairs, in the upper ward of the county, in the beneficial improvement of which he has displayed great taste. He has one son (Robert), and two daughters; his son was a candidate for the representation of Glasgow at the last election, on the Conservative interest.

Carstairs House was erected from designs by William Burn, Esq., architect, Edinburgh, in 1824. The style of this extensive building is what is usually called

the manorial or domestic Gothic. The general effect produced by Carstairs House is that of rich magnificence; its details and ornaments exhibit beauty and elegance. Its internal arrangements, its decorations, and its furniture, are in a style of richness and splendour corresponding with the grandeur of its external appearance. In the pleasure grounds stand this truly splendid residence of a British merchant, inferior to none in the county, with the exception of Hamilton Palace. Green lawns, interspersed with stately trees, single or in groups, spread around, rising into gentle knolls, or sloping towards the Clyde, which is here a beautiful and expanded river.

The ancient castle of Carstairs * was removed in 1822 to make room for the new mansion. Some patriot querist may probably envy me in being the last person who slept in the apartment formerly used as a dining room by the patriotic Robert Wiseheart,† who was bishop of Glasgow in the year 1292.

The village of Carstairs is about two miles distant from the house; and since Mr. Monteith's purchase of the estate, which formerly belonged to the late Mr. Fullarton father of his present lady, has become the admiration of all travellers. The village which, previous to Mr. Monteith's improvements, presented the dirty irregular appearance too frequently exhibited by Scotch villages, has now a rural neatness and simple beauty, which may be put in competition with the most boasted in the sister kingdom.

When it was resolved to invite Sir Robert Peel to dinner in this city, upwards of four hundred of the principal inhabitants met in the Trades' Hall, and unanimously fixed on Mr. Monteith as the fittest person to take the chair at the festival; and the manner in which he conducted the business of the evening on the 13th January, 1837, when 3430 persons were assembled, met the approbation of every one. The Right Honourable Baronet was a guest at Carstairs House, and attended the presbyterian church service in the parish church.

KIRKMAN FINLAY ESQ. OF CASTLE TOWARD.

Mr. Finlay is one of our most able and enterprising merchants, alike distinguished for public spirit and active benevolence. As a country gentleman, the splendid improvements he has made on his estate have no parallel in the county of Argyle, where it is situated, while his princely domain reflects great honour on his classical taste. The adage that a prophet hath no honour in his own country, does not apply

* Page 4.

† When the contest between Bruce and Baliol for the crown of Scotland took place, Edward I. of England was appointed umpire. Having entered on his functions, Edward directed the competitors to meet him at Norham, and thither bishop Wiseheart repaired. On opening the business, the royal umpire said, "that although he might justly claim the superiority of the kingdom of Scotland to himself by right, yet, as a friend and arbiter, elected by themselves, he would labour to compose the present controversy in the best manner he could." The king having finished, the bishop rose and "gave him hearty thanks in name of the rest for his great condescension in accepting the office of arbiter; but when it pleased his Grace to speak of a right of superiority over the kingdom, it was sufficiently known that Scotland, from the foundation of the state, was a free and independent kingdom, and not subject to any other power whatever; that their ancestors had valiantly defended themselves against the Romans, Picts, Britons, Saxons, and Danes, and all others who sought to usurp upon them; and although the present occasion had bred some distraction in men's minds, all true-hearted Scotchmen will stand for the liberty of their country till their death, for they esteem their liberty to be more precious than their lives, and in that quarrel will neither separate nor divide."

to Mr. Finlay, for the community has ever been ready to do him honour. Mr. Finlay has been Governor of the Forth and Clyde Navigation for more than twenty years. In 1812, he was elected Lord Provost of Glasgow; and, during the same year, Member of Parliament for the Glasgow district of Burghs. In a subsequent Parliament, he was returned for Malmesbury. He is a deputy lieutenant for Lanarkshire—was elected Lord Rector of the University of Glasgow in 1819—and in 1839, Dean of Faculties in the said University.

Ninety years having elapsed since this city was represented by one of its merchants, Mr. Finlay's election was attended by extraordinary marks of public approbation. A number of his fellow citizens, in token of their esteem and regard, appreciating his commercial enterprise, popular talents, and public spirit, drew him at his election in an open carriage from the Town Hall to his house in Queen-Street, supported by two personal friends, who had been instrumental in securing his election. Silver medals were struck on the occasion,—on the one side were inscribed the words, "Truth, Honour, Industry, Independence. Finlay, 1812,"—and on the other, "Agriculture, Commerce, and Manufactures. For our King and Country," &c. Mr. Finlay having had the rare honour of being returned free of expense in this district, he gave two hundred guineas—and his brother-in-law, Archibald Buchanan, Esq. of Catrine, one hundred guineas, soon after the election, to the corporation of Rutherglen (the returning burgh), the interest to be given annually to poor householders in the burgh. The Provost of the Burgh, and the minister of the parish, both for the time being, and I were appointed trustees for seeing the terms of the deed implemented.

THE REV. DR. BURNS.

This city has always been conspicuous for the respectability of its clergymen, and at no period more so than at present. The late Dr. John Burns, the venerable and justly respected minister of the Barony, exercised the ministerial functions of that parish for a period of sixty-nine years; viz., four years as assistant to Mr. Laurence Hill, and sixty-five as the minister of the largest parish in Scotland. Dr. Burns, who was born on 13th February, 1744, O. S., was father of the church of Scotland for several years, and had served a cure for a longer period than had fallen to the lot of any Presbyterian or Episcopalian clergyman in this city since the Reformation in 1560; and there has been no Roman Catholic bishop or archbishop since the renovation of the See in 1129, who held his office for such a length of time. To distinguished talents he united evangelical principles, which he uniformly inculcated on his people with the gentleness of a true christian, and the earnestness of a faithful minister. His popularity, which increased through a prolonged life, was that popularity which arises from a faithful discharge of duty. This excellent man, in the enjoyment of that serenity of mind for which he was distinguished, departed this life on 26th February, 1839, full of years and honour.

JAMES REDDIE, ESQ., ADVOCATE.

Mr. Reddie has filled the office of "Legal Assessor to the City of Glasgow" for a period of thirty-six years, with great honour to himself, and benefit to the community.

Mr. Reddie's high professional attainments as a lawyer have been acknowledged at home and abroad by those well qualified to judge. While the profound knowledge of his profession enabled him to discharge his official duties with full approbation, Mr. Reddie rendered essential service to the community by his judicious counsel to the magistrates during times of great excitement and alarm; and it is due to the discernment of the magistrates to say, that during thirty years I sat with

him at the council table, they cheerfully acted under his advice—and to this circumstance is chiefly to be attributed the success with which they conducted the affairs of the city in perilous times.

Mr Reddie has just published a volume—*“Inquiries, Elementary and Historical, in the Science of Law.”* The following excerpt is from the chapter—*Advantages and Disadvantages of Codification*:—“In the impartial and dispassionate view of the subject which we have thus endeavoured to take, we have arrived at the conclusion, that although not calculated to realize all the extravagant expectations of its admirers, or to secure the vast advantages they predict, codification, or the legislative arrangement of the private law, civil and criminal, of a nation, is likely upon the whole to be productive of good, the probable advantages more than counterbalancing the probable disadvantages. In using the terms, legislative arrangement, we mean under legislative authority; for it is abundantly obvious that popular representative legislators, such as those of this country, of the United States of America, or of France, are by no means fitted for such a task. The work must obviously be intrusted, in the first instance, to a commission or commissions, composed of a few of the ablest and most experienced and enlightened lawyers whom the country possesses, whose talents have been cultivated, and whose views have been enlarged by practice, if not on the bench, at least at the bar. Even by such men the task will be found an arduous one, and when completed, their work should, of course, be subjected to legislative revision.

“In England, indeed, considerable progress has already been made in this great work. It is gratifying to reflect how many amendments were some years ago introduced into the criminal law of that country under the official encouragement, though not professional direction, of Sir Robert Peel. For his long continued exertions for the practical improvement of various departments of the law, Sir Samuel Romilly deserved the gratitude of his country. The still more extended, indefatigable, and energetic exertions of Lord Brougham have already achieved much, and it is hoped, will accomplish a still greater boon for the English nation. The various reports of the law commissions appointed during the two late reigns appear to be marked by their practical wisdom. And at no very distant period it may reasonably be expected, the private law, civil and criminal, of the British nation, will attain all the improvement, and possess all the beneficial qualities which codification, or legislative classification and sanction are capable of realizing.”

ARCHIBALD ALISON, ESQ., SHERIFF OF LANARKSHIRE.

Mr. Alison, while Advocate-Depute on the Glasgow circuit, distinguished himself by that eminent professional ability which ultimately procured for him the office of chief magistrate of the most populous manufacturing county in Scotland, and gave earnest of those splendid talents which he has displayed as the historian of the French Revolution. The Sheriff's valuable and undaunted services in regard to trades' unions, have procured for him the respect and esteem of good men of all parties.

When suffering and privation exist in Glasgow, the hand of benevolence has been upon all occasions open to alleviate distress. To enumerate the individuals who contributed their time and their means for this humane and laudable purpose, would be a difficult task; but it would be unpardonable to omit the names of Provost Dalglish, who acted as chairman of the relief, fever, and cholera committees, John Smith, youngest, John Alston, Robert Strang, William Rodger, Robert Ferrie, and William Leckie, Esquires. These gentlemen received grateful acknowledgments from the public for the invaluable services they rendered on these occasions.

PUBLIC MONUMENTS IN GLASGOW.*

The following are a few of those which have been erected by the citizens of Glasgow to the memory of individuals who have been pre-eminently distinguished in their respective professions.

In 1806, an Obelisk was erected on the Public Green, in honour of Lord Nelson.

In 1812, a marble Statue, by Flaxman, was erected in the Town Hall, in honour of the Right Hon. William Pitt.

In 1819, a bronze pedestrian Statue, by Flaxman, was erected in George Square, to the memory of Sir John Moore.

In 1825, a Doric Column, surmounted by a colossal Statue, was erected in the Necropolis, to the memory of John Knox, the celebrated Scottish Reformer.

In 1832, a bronze Statue, in a sitting attitude, by Chantry, was erected in George Square, to the memory of James Watt, the improver of the Steam Engine.

In 1837, a Doric Column, surmounted by a colossal Statue, was erected in George Square, to the memory of Sir Walter Scott.

In 1840, a subscription has been entered into for erecting a bronze equestrian Statue in honour of the Duke of Wellington. The subscription amounted in the course of a few weeks to upwards of £9000.

* The monuments in Glasgow were the first in Scotland that were erected in honour of these great men.

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